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OF

PHRENOLOGY;

OR,

AN ACCOMPANIMENT

TO

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J. DE VILLE'S

PHRENOLOGICAL BUST.

"And if we can go no farther than *this mental geography*, or delineation of t distinct parts and powers of the mind, it is at least a satisfaction to go so far; and t more obvious this science may appear (and it is by no means obvious), *contemptible still must the ignorance of it be esteemed in all pretenders to learning a philosophy.*"—David Hume's 'Essays,' vol. ii., p. 12, Edit. Edinburgh, 1804.

A NEW EDITION,

WITH A VARIETY OF ILLUSTRATIONS.

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NAMES OF THE ORGANS.

1. Amativeness.
2. Philoprogenitiveness.
3. Inhabitiveness or Concentrativeness.
4. Adhesiveness.
5. Combativeness.
6. Destructiveness.
7. Secretiveness.
*. Alimentiveness.
8. Acquisitiveness.
9. Constructiveness.
10. Self-Esteem.
11. Love of Approbation.
12. Cautiousness.
13. Benevolence.
14. Veneration.
15. Firmness.
16. Conscientiousness.
17. Hope.
18. Marvellousness or Wonder.
19. Ideality.
20. Mirthfulness or Wit.
21. Imitation.
22. Individuality.
23. Form.
24. Size.
25. Weight.
26. Colour.
27. Locality.
28. Number.
29. Order.
30. Eventuality.
31. Time.
32. Melody or Tune.
33. Language.
34. Comparison.
35. Causality.

NOTICE TO THE READER.

THE object of the publisher of this work is to show the truth of Phrenology by the adduction of indisputable evidence, for the authenticity of which he holds himself responsible; but he makes no pretension whatever to scholarship, and merely aspires to the character of a diligent pioneer in clearing away *practical* difficulties, and accumulating evidence. With the truly liberal and enlightened, this, he trusts, will be deemed a sufficient admission; but to those who think *matter* can never compensate for *deficiency of manner*, he begs to assure them his various avocations preclude him from realising their wishes or satisfying their taste: nevertheless, even with such hypercritics, he indulges the hope that unwearied diligence in the investigation and accumulation of facts, a long and varied experience as a manipulator, and a sincere desire to sacrifice everything to the propagation of Truth, will render this attempt at composition, however imperfect, at least *a pardonable offence*.

March, 1841.

PREFACE.

Amidst the numerous branches of knowledge which claim the attention of the human mind, none can be possibly of more importance than that wherein man himself is the subject of the inquiry. Whatever most intimately concerns ourselves must be of the first moment. The principle of self-love which is inherent in our nature, whatever means we may take to conceal it, suggests that no other species of knowledge can stand in competition with it: everything is deemed highly interesting which has an immediate relation to ourselves; and the degrees of its importance are measured by its influence upon our own well-being.

Phrenology, being the most correct and scientific mode of studying the natural history of man, showing the relations between the cerebral organization and the manifestations of the mind, becomes of great importance, as the basis of the doctrines of insanity, education, social life, and criminal legislation.

"The natural history of man," says Professor Lawrence, "is yet in its infancy." "Little progress," says Dugald Stewart, "has hitherto been made in the philosophy of the mind." Dr. Haslam, in his 'Observations on Madness,' says, "that whenever the functions of the brain shall be fully understood, and the uses of its different parts ascertained, we may then be enabled to judge how far disease, attacking any of those parts, may increase, diminish, or otherwise alter its functions."

Our object in this small work is, as with the collection, to illustrate and invite further attention, with the view of endea-

vouring to establish a more correct inquiry into the natural history of man, and to prove that the brain is not a single organ of the mind, but that it is a congeries of organs, each having a distinct function or office assigned to it:—hence the importance of Dr. Haslam's observations.

Phrenology is still, like all other sciences, with some imperfections, and can only arrive at maturity amongst enlightened men by slow degrees; it therefore becomes necessary to be careful in unfolding and going into the first principles of it, and studying them with care.

Man has, not without reason, been called an epitome of the universe, his mind being subject to all the laws of Nature; and, during some part of his existence, his state is very like that of the vegetable system: he rises by imperceptible degrees to animal, and at last to rational life,* and has in him the principles that belong to all. We are placed in this world by the Author of our being, surrounded with many objects that are necessary or useful to us, and with many that may hurt us. We are led, not by reason only, but by many instincts, and appetites, and natural desires, to seek the former and to avoid the latter.

In cases, however, where Nature has not been so liberal as to render the formation of character possible merely from the mind's own internal resources, much may be done by judicious culture in early life; and in all cases whatever, in such a state

* "On observing the operation of the internal faculties of the mind, we find that, like the internal senses, they are also developed *in succession*, and that some of them arrive at maturity sooner than others. The child observes long before it reasons and compares. It feels and appreciates affection and kindness, *before it experiences the sense of justice, the love of praise, or the desire of gain*; and it is not till puberty that the sexual feeling begins to be felt. From a very early period, however, the infant shows *an irresistible tendency to imitation*, or to do as those around it do; and if this be rightly directed, it becomes as active an instrument in the formation of bad habits as it may be made one of good." *Vide* Dr. A. Combe's admirable work on 'The Management of Infancy,' p. 365, 1840.

of society as ours, its growth, even when most completely spontaneous, cannot fail to be influenced, in a greater or less degree, by instruction, by the contagion of example, and by various other adventitious causes. It is reasonable, therefore, to believe that there are numberless minds in which the seeds of taste and intellect, though profusely sown, continue altogether dormant through life; either from a total want of opportunity to cultivate the habits by which they are to be matured, or from the attention being completely engrossed by other pursuits. In instances such as these, it is the province of education, which may be most essentially assisted by Phrenology, to lend its aid, to point out and invigorate, by due exercise, those principles in which an original weakness may be observed, by removing the obstacles which check the expansion of the powers in any of the directions which Nature disposes them to shoot, and by assisting her to accomplish and perfect her designs.

By a careful study of Phrenology, combined with education, in the disposal of youth, what a field for research is open?—for when we reflect on the different branches of human knowledge, it might seem that, of all subjects, human nature should be the best understood; because every man has daily opportunities to study it in his own passions and his own actions. *Human nature, however, is little understood.* Writers of warm imagination hold that man is a benevolent being, and that every man ought to direct his conduct for the good of all, without regarding himself but as one of the number: those of a cold and contracted mind hold him to be an animal entirely selfish; to evince which examples are accumulated. But neither of these systems is that of Nature. The selfish system is contradicted by the experience of ages, affording the clearest evidence that men frequently act for the sake of others, without regarding themselves, and sometimes in direct opposition to their own interests. Man, in fact, is a complex being, composed of principles, some benevolent, others selfish; and those principles

so justly blended in him as to fit him for acting a proper part in society. Man is indeed a weak creature: he has strong passions; but he has also strong powers within him to counteract their operation. He possesses reason; and his happiness certainly depends upon the voluntary use or abuse, the neglect or the exertion, of this noble faculty, in combination with highly cultivated moral sentiments and well-regulated animal propensities.

The nature of man is susceptible of improvement; therefore we contend that every effort should be made to acquire it. It cannot be said that the endeavour must of necessity be abortive; it cannot be said that we have not natural incitements sufficient to encourage a vigorous attempt. We have sensibilities of moral rectitude—we have a natural love of excellence—we have intellectual powers capable of improvement—we have precepts innumerable—and, to the honour of human nature let it be added, that examples also abound.

Many individuals, who enrolled themselves among the sects of ancient philosophers, have exhibited most animating proofs of the power of human nature. It is not to be supposed that they possessed faculties more in number, or more perfect in their kind, than the present race; but they loved excellence and they believed they were capable of it. That belief operated most powerfully on their exertions; they succeeded in their attempts, and stand forth among mankind like colossal statues amongst a collection of images less than the life. We hope, therefore, it will be rendering an essential service to mankind, if we can revive this belief among those of the present day, that the science of Phrenology will, by a judicious study of it, lead to the improvement of the mind. Proofs we have that, during intense studies, an alteration in those parts of the head regularly exercised in those studies has taken place in several instances while little or no alteration has taken place in the other parts. *The fact is so*, and facts are stubborn arguments: this fact in-

duces us to entertain the idea that Phrenology will prove beneficial to mankind, and that proper means, by the study of it, may be introduced, much to the interest and benefit of the rising generation, by the establishment of improved systems of education, and also by a scientific treatment of mental diseases.

It is fair to presume that what is attainable in science may, to a considerable extent, be effected in morals, in education, in mind. So in life, if you inform your disciple that he is able to reach a degree of excellence, and urge him to the attempt, he will frequently make great advances, and improve to his own astonishment; but, indulge his natural indolence, timidity, or despair, by expatiating on the irremediable weakness of human nature, and you effectually preclude even his endeavours, and add to his natural imbecility. Here Phrenology will lend its aid, by the power it will give, to point out the weakness of those who in early youth are so unfortunately organised, which, if done, steps may be taken to invigorate, excite, and cultivate, by the establishment of an improved system of education.

In the works of art, sculpture, and in painting—in the subordinate operations of mechanical ingenuity—to what perfection does the hand of man attain! "When a savage sees a watch, he adores it as a god. No earnestness of assertion would convince him that it was a work of art, and of a creature in all respects like himself, except in acquired dexterity." And can man improve himself so highly in the manual arts, in science, and in the productions of taste, and be unable to arrive at any real and solid improvement in the finest art and noblest science—the improvement of the heart and mind? Half the attention and the constancy which is employed in acquiring skill in the occupations by which money is to be acquired, if bestowed on the melioration of the morals and the improvement of the mind, would produce a most laudable character. Therefore, to attend to the workings of our own minds—to trace the power which external objects have over us—to discover the

nature of our emotions, affections, and propensities—to comprehend the reason of our being affected in a particular manner—must have a direct influence upon our pursuits, our character, and our happiness: to do that and to point with the finger to the why and the wherefore of those differences in the mind, disposition, and character, after so many able writers on the philosophy of mind and man have comparatively failed, appears to be left for Phrenology.

The science of Phrenology still seems to be misunderstood by many persons: by some it has been considered as tending to fatalism and predestination, which arises from a want of due consideration; for the Phrenologist does not assert that the peculiar form of the skull directs the actions of mankind, but that the actions and surrounding circumstances of mankind affect and produce it. A child or adult giving way to bad propensities, and constantly living in vicious habits, will cause an increase of the propensities: while, on the other hand, by avoiding bad actions and associations, and by the practice of better habits, the organs of the moral sentiments and intellectual faculties will increase, and those of the opposite tendency gradually diminish—the child or adult at the same time losing the desire for evil actions.* Thus *Phrenology is but a visible evidence of the effects of conscience;* and where the base pas-

* "From the principle already laid down, that each faculty is constituted with a distinct relation to objects or qualities as peculiar to itself as light to the eye or sound to the ear, it follows that, when we wish to exercise or strengthen any of them, we must directly excite them to activity by the presentment of their own stimulus; and when we wish to keep in abeyance a faculty which is already too strong, the only effectual way is to withdraw its object and leave it in repose—in short, 'to lead it not into temptation.' But for the ready responses of the faculty to the stimulus of objects, temptation would be a word devoid of meaning....From this proneness of the mental faculty to respond readily to its natural stimulus, it obviously becomes a matter of great importance to the future character of the individual to *regulate the circumstances in which he is placed*, or *the stimuli by which he is surrounded*, especially during the very impressionable period of infancy; for with the fact before us, that *every feeling or faculty is in this way strengthened*

sions are not kept down they will appear plainly in the form of the skull. These alterations are clearly shown in the changes of form which have taken place, illustrated with authentic narratives of the cases, of which I have 140 examples.

Phrenology laboured under a great disadvantage, on its first announcement, from the misapplication of certain names given to certain organs. Thus destructiveness was called murder. It arose from the fact of Dr. Gall finding those murderers whom he examined invariably to have the organ large and marked; but observation showed that this organ, which every one possesses, appeared more prominent as the passion for destructiveness increased. Again, acquisitiveness was first called theft from a similar cause; thieves having this organ peculiarly large; and it is invariably strongly marked in all children and adults who are penurious and covetous.

The study of Phrenology tends to show the absolute necessity and advantage of a high moral conduct in the heads of families and preceptors, leading others to the practice of virtue, and confirming it in their minds; and it should be applied, in conjunction with the monitor within, to chase away the vices of mankind.

If the brain, which is the seat of the mind, be looked at, and considered with the alteration in the form of the skull following the working of the brain, it appears self-evident and conclusive, from the great number of changes of form which are now collected, that a change of form is not confined to the young alone, but is found to take place at various periods, from 8 to 80 years of age; we having a great number of casts where change of form of the head has taken place with corresponding

by reiterated exercise, it is natural to suppose that many a child owes much of its perverse temper, or cheerful disposition to the continued influence of similar dispositions exhibited by the nurse or mother during the early period of its existence." See Dr. A. Combe on Infancy, pp. 344-5, and note to p. 92 herein.

change of character between 8 and 50 (nay 80) years of age, as the following case will in part demonstrate.

CHANGE OF FORM.

We beg to draw attention to the following case, where 6 casts have been taken from the same individual at 6 different periods, the first 3 taken at 8, 13, and 16 years of age, during which time his education was neglected; the latter 3 were taken at 19, 22, and 28 years of age, during which time (the first 3 years) education commenced, and the whole of the time he was constantly in high moral society, and employed with or by them; it being evident that, from example and moral conduct, the alterations in the form of the skull have followed the working of the brain.

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The busts from which these are taken are authenticated casts of the celebrated George Bidder, called at the period when these three, Nos. 1, 2, and 3, were taken, the "Devonshire

calculating youth." Immediately after the fourth cast was taken, he commenced as a civil engineer, and has been so occupied successfully ever since.

The cast, No. 1, was taken when 8 years of age: we here find the forehead nearly upright, the anterior part of the moral sentiments, the reflecting faculties, constructiveness and ideality, eventuality, individuality, and number, all very largely developed, while the rest of the perceptive and intellectual faculties are moderately developed. By a reference to No. 2, which cast was taken at 13 years of age, we find a deterioration in the reflecting faculties, moral sentiments, and ideality, with a slight increase in the lower perceptive faculties. By reference to No. 3, which cast was taken at 16 years of age, we find a much greater deterioration in the reflecting faculties and moral sentiments, which have receded a full inch during 8 years, being the period between taking the cast No. 1 and the cast No. 3; during the latter time the perceptive faculties have got somewhat larger.

Now here is a curious fact of an alteration of the skull following the working of the brain, and, it appears to us, in perfect accordance with his occupation and the society in which he was placed during the 8 years: for let it be remembered, that from the time of taking the first cast, which was at Bath, before he came to London, to the time of taking the third cast, his father was going from city to city, or place to place, exhibiting him for his extraordinary powers of mental calculation, and, being in the humbler walk of life, he frequently exhibited him in public houses, generally taking up his residence in those places; probably not from choice, but for the convenience of getting lodgings readily for a few nights. Now, any one acquainted with the society that visits public houses is aware that very little, if anything, was going forward that would gratify the moral sentiments or reflecting faculties; and it is in this part of the head, the seat of those organs, that we find a great deterioration going on, to the extent of one inch

at least: at this time (when the third cast was taken) he was taken by the hand by some ladies and gentlemen; he was p[illegible] a superior school; and from that period he mixed in [illegible] moral and intellectual society: and mark the result which [illegible] place after he had been about three years under tuition, the whole of the time enjoying moral society with moral precept. He then, being about 19 years of age, came to London, and was intended for a military engineer; when we took a fourth cast of him,

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No. 5, by comparison of which with No. 4, a front view of No. 3 cast, it will be seen that a great increase has taken place in the reflecting faculties and moral sentiments; the form of the skull answering the working of the brain during these three years of moral education and society; showing, to demonstration, the effects of moral precept and direction in combination with education. It appears that he was a very short time occupied in military engineering, and that he then took to civil engineering. When he had been about two years and a half in the occupation of a civil engineer, we took a fifth cast of him, No. 6, by comparison of which with No. 5 it will be seen that the extension of the whole forehead is going on. After he had been nearly 9

years occupied as a civil engineer, and nearly the whole time in the society of engineers of high reputation and moral character,

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we took a sixth cast of him, No. 7, by which it will be observed that a general expansion of the whole of the intellectual faculties and the moral sentiments has been going on : but to show it more distinctly, we here give a double diagram, No. 8; the

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lines *b*, *b*, *b*, *b*, being taken from the fourth cast taken at 19 years of age, and the lines *a*, *a*, *a*, *a*, taken from the last cast, near 9 years after, the whole of the time being engaged in high moral and intellectual society, and we find that the head has undergone a change in accordance with it; namely, the moral sentiments and intellectual faculties have increased during this period three-eighths of an inch in some parts, while, what to some may appear extraordinary, the propensities have got less during the same period, as will be seen by reference to the diagram; clearly developing the action that has been going on, and the form of the skull in perfect accordance with the working of the mind through the brain at the same time. *Doubters, sceptics, and medical gentlemen, read, mark, learn, and inwardly digest, these extraordinary facts.* But if those were the only facts showing where change of form has taken place we should have said but little, or have been silent, on the occasion; but we are in possession of 140 casts, taken at all periods of life, from 8 to 80 years of age; amongst them several cases of an extraordinary nature, where, propensities having been controlled, the heads in the parts corresponding have got less; and three or four cases where some of the higher sentiments have ceased to act, and the head has got less in the parts, according with the change; clearly demonstrating that a change of form of the skull takes place by absorption and deposition with the working of the brain. Hence the importance of Phrenology, in enabling us to give proper direction to the faculties, to inculcate true principles of morality, by exciting respect for the moral, and urging the necessity of a rigid observance of the natural and organic laws.

What is your deduction from these principles of morality?

We conclude, from these principles that all the social virtues consist in the performance of actions useful both to society and to the individual; that they may be increased by moral exercise; that they may be all traced to the object of the pre-

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servation and happiness of man; that Nature, having implanted in our bosoms a feeling of the necessity of this preservation, imposes all the consequences arising from it as a law, and prohibits as a crime whatever counteracts the operation of this principle; and, moreover, that we are happy in exact proportion to the obedience we yield to those laws which Nature has established with a view to our happiness and preservation, the law of Nature being the regular and constant order of events according to which God rules the universe,—His Will.

Then, from what has come within your notice, are you of opinion that we have the power to alter our development, and thereby produce beneficial alterations in our character?

Certainly, that is our opinion, based upon facts, which show that alterations have been produced that will create a difficulty of any reaction of the faculties; or, more properly speaking, the power of going onward in that altered state will become more easy of accomplishment.

To further elucidate this subject, we furnish the preceding engraving, for which we are indebted to a friend. It represents the progressive changes of form which his son's head underwent from birth to the age of 21. It clearly demonstrates the folly of relying upon the mere physiological opinions of individuals, however eminent, unless verified by experience.

The preceding drawing of six different appearances of the same head was taken at six different periods, of Mr. Henning, Jun., by his father, who being much struck with the six casts of Mr. Bidder, to which they form a fine contrast, conceived the idea of the utility of making them known, and kindly presented me with the drawing taken from the life, with permission to publish it conjointly with the others.

Mr. Henning attending an introductory lecture by Dr. Munro, on Anatomy, at the University of Edinburgh, in 1803, wherein, speaking of Osteology, the doctor introduced Drs. Gall

and Spurzheim's system of Phrenology. When Mr. Henning remarked, that to illustrate a certain assumption the doctor had made in his discourse, it would be most desirable to have drawings of an individual, taken at different periods, from birth to manhood. A few weeks after Mr. Henning's son was born, from whom the drawings were made, at various successive periods, the size of life.

The first drawing was taken within 6 hours after birth; the second was taken at 2 years old; the third was taken at 4 years old; the fourth was taken at 7 years old; the fifth was taken at 14 years old; and the sixth was taken at 21 years of age.

In this case we find the changes of form very different to those in the head of Mr. Bidder. Here from birth until manhood the education and the moral direction were uniformly attended to, and the organization goes on also progressively and uniformly improving; while that of Mr. Bidder's is neglected from 8 years old until 16, and a serious deterioration takes place. Mr Bidder is then taken by the hand, and a great improvement ensues from the influence of education and the intellectual and moral society in which he has had the good fortune to be placed.

Another point to be remarked in Mr. Henning, jun., is, the great improvement that occurred between 14 and 21 years of age: in the wood-cut you will perceive the whole of the organs on the superciliary ridge have got a great deal larger than at any of the other periods; and it is well known at that time he made a stride in his professional knowledge as an artist, receiving some honorary distinction and rewards.

INTRODUCTION.

This book and the bust accompanying it are offered to the notice of those who wish to take a cursory view of the science; but those who feel a desire to enter into a philosophical inquiry, and to become practical Phrenologists, must direct their attention to a collection of facts from casts easily obtained for the purpose, to Nature, and to the writings of Gall, Spurzheim, the Combes', &c. &c.

To give some facility in the first observations, we have made deductions from facts in our collection well known and easily referrible to—and avoided speculative inferences—these have been considerations we have endeavoured to attend to.

In studying the science, some general principles should be carefully observed in the early consideration of the manifestations of the organs. With the view of giving some facility, we have given figures, to show that a great difference of form exists between individuals acting under the influence of the moral feelings and others acting under the influence of the animal propensities—Indians manifesting great cruelty, and others capable of entertaining superior feelings—of the frontal sinus at times found at Form, Individuality, Size, Weight, Colour, and Locality—of a muscle observed at times* on the side of the head, when so, producing some difficulty in making observations on the organs of Secretiveness, Acquisitiveness,

* V. Figure G, p. 36.

and Constructiveness—of a philosopher and an idiot, illustrative of a great mind, and the reverse—also of singularly-long and flat-shaped skulls, to show that great differences of form exist—moreover, we have given a set of figures, to show changes of form in the same individual, from a deterioration, owing to a neglect of education, to an amelioration, produced by education and moral direction:—also, feeling, by a study of the science, great facilities will be given to preceptors, and those having the care of youth, to invite inquiry, figures, with some observations, will be found, which, if attended to, we hope will assist others to point out some of the difficulties at present experienced in education.

As the situations of the various organs will often, to those who take a view of the science, come under consideration, we beg attention to their arrangement, which must impress feelings of admiration at the beautiful order in which Nature has placed them, and at the perseverance and research made in the discovery of their situations, as determined by Drs. Gall and Spurzheim, Mr. G. Combe, and others.

It must strike those who take a view of what the science has done, opposed as it has been, when it is known that we have in our collection, independent of others, upwards of 2,400 casts from nature, of known characters, well authenticated, and without a single instance of contradiction; and are enabled to prove the 36 organs, as established, not by two or three examples, but, the greater number of the organs, by 2 or 300 specimens: moreover, upwards of 3000 skulls of animals have been added to the collection, which also bear out the truths of the science.

This, to some, at a first glance, may appear incredible; but those having any doubt may see and judge for themselves.

The importance of the science is, by numbers, particularly

by those who will take the trouble to investigate the facts collected, beginning to be extensively and duly appreciated; and, from a great number of circumstances which have come within our notice, we are impressed with a feeling, that it will be found of more importance than at a first glance appears, by giving great facilities to the proper direction of the faculties, and in the application of them to education, and to the selection of professions.

Another point to attend to is, many persons, after taking a view of the collection, and admitting the truths of the science, make an objection, namely, that they differ with the Phrenologists as to the multiplicity of the organs; and have entertained an idea, that they maintain that heads have 36 organs, all largely developed. Those who will take the trouble to inquire, and investigate what the Phrenologists have done and are doing, when they predicate actions and speak on character from development, will find that is not the case.

We go further, for the immense number of facts collected prove it, that every head, except the heads of idiots, has the 36 organs; but we do not attempt to say they are all largely developed and active in one individual; but by observation on a few persons, every organ in one or the other will be found fully developed (that is in a few individuals); and those who will pay attention to the manner a practical Phrenologist proceeds when speaking of actions, will find that he does not attempt to point out or give more than from five to nine or ten prominent points of character,* except in very extraordinary cases:

* In drawing conclusions as to character from the development of the brain, we ought to be informed whether the parties are educated or not, *which is seldom the case*; but, certainly, hitherto, few uneducated persons have been brought to us, except for some peculiar talent. Therefore, if an uneducated person is to be examined, we look for 2 or 3, or not more than 4 points, in the character; and in the uneducated, they in general arise from single organs; for instance, a mental calculator from

hence the Phrenologist does not attempt to give more than so many prominent parts of the head, the rest being small or moderately developed, taking the same part in the character, as their size and activity manifest.

We recommend to those studying the science to collect facts upon which to reason, and not to be satisfied with mere reasoning alone; for upon facts they may take their stand with some chance of success; but, by reasoning first, they may fall into an error, not easy at times successfully to retract. This may be avoided in the early consideration of the science, by proper attention to the fundamental powers of the organs, and by carefully attending to the manifestations of their degrees of activity, previously to speaking of their actions, which it will

Number; a good guide, or a person having a good memory of places, from Locality; and one who cuts out papers or draws well, to represent what he sees, from Form; in addition to these he may be influenced, in his actions and behaviour, by the sentiments or propensities; and hence, in the uneducated we look only for 2, 3, or 4 points of character, with the corresponding projections as to the size of the appropriate organs in the head.

Among the educated we look for more points of character, say from 4 or 5 to 12 or 14, and for the corresponding cranial projections; these points of character seldom arising from single organs, but in general from the combination of 2, 3 or more organs, and which of course occasion more difficulty in drawing conclusions as to characters.

If this is fairly looked into, it accounts for the inequalities at times, nay, in general, found in the tables of the skull, (which inequalities have been held out by sir Charles Bell and others, as a sort of bug-bear preventive of the power of drawing conclusions,) for it is *between* the salient cranial points that the skull becomes thickened more freely than *at* the salient cranial points; and thus these inequalities, the result of unequal and disproportionate exercise, arise.

Qy. Have we any medical books, which, in any way, account for these inequalities? if not, I think there ought to be; for Nature is constant in her laws, and eminent anatomists and physiologists ought to have been able to account for them by this time; but this I fear has been left for the Phrenologists to do, for I am at a loss to know who else has accomplished it. If any non-phrenologist has already performed it, I hope it will be pointed out and the authority given, for which we shall feel obliged.

be well not to attempt until a knowledge of the different degrees of activity is attained; for when actions of the organs are spoken of, and character is predicated, it is not by a single organ, but under combinations and with modifications of other organs; also, as they may be influenced by the greater or less proportion of the anterior and posterior regions, and the quantity more or less in the base or upper part of the head: if these observations be attended to, it will not be difficult to predicate actions of the organs, or draw conclusions on heads, skulls, &c.

The study of the human mind is considered by many persons as of modern introduction: that is not the case; for history points out that the philosophy of man is of ancient date. Thales, in his discourses, stated that a cultivated mind, and a study of the philosophy of man, are the chief sources of happiness, and advises the taking of more pains to correct the blemishes of the mind than of the face. Carneades, Anaxagoras, and Socrates, pursued the same studies. The latter, according to Cicero, was the first who called down Philosophy from heaven to earth, and introduced her into the public walks of life, and into the domestic retirements of men, that she might instruct them concerning life, manners, and the truth of Nature.

There are numerous ancient and modern philosophers who have made mind and man their study in a general way; but none have succeeded in pointing out the actual seats of the different primitive functions of the mind, as Drs. Gall, Spurzheim, Combe, Mr. G. Combe, and other phrenologists have done.

There are some persons who, from not having time, others from inclination, still speak with doubt on the science; but *few now rail at it*. Our advice to them is, Do as we have done; search diligently, and collect facts, and if they do not find as we have, then deal out the tainted arrow, or disbelieving

sneer, as *self-conviction can only be founded on self-observation*: for unless strong facts are produced against Phrenology, all opposition must prove unavailing, and the opposers, without facts to support them, will ultimately find themselves weak in their arguments, and unable to command the admiration of their deluded disciples.

MANUAL

OF

PHRENOLOGY,

&c.

PHRENOLOGY is a system of Philosophy of the Human Mind, and is founded on facts ascertainable by consciousness, observation, and reflection.

It is a principle of Physiology which cannot be disputed, that dissection alone can give us no information concerning the functions of the bodily organs: no anatomist, by dissecting the optic nerve, could predicate that its function is to minister to vision; nor, by dissecting the tongue, could discover that it is the organ of taste. In the same way anatomists, in dissecting the brain, cannot discover the functions of that organ.

Each Metaphysician also, having confined himself chiefly to reflection on his own Consciousness, could not, except to a very limited extent, discover the primitive powers of the mind. On the other hand, *Phrenologists* have endeavoured to avoid the obstacles presented by these modes of philosophising, and have compared manifestations of mind with development of brain, in an immense number of individuals. The system now offered to notice, and to which attention is directed, is the result of observations thus made; and the principal points

which are conceived to be established, by extensive observation and induction, are the following:—

1st. That the brain is the material instrument by means of which the mind carries on intercourse with the external world.

2nd. That the brain is an aggregate of parts, each of which has a special and determinate function.

3rd. That the form of the brain can be ascertained by inspecting the cranium; and that the functions of the several parts may be determined by comparing their size with the power of manifesting the mental faculties.

4th. That character, moral, intellectual, sensual, or religious, will not be manifested without corresponding development of the brain.

In making observations on the manifestations of the cerebral parts, with the view of drawing deductions therefrom, there are some points requisite to take into consideration, namely, to consider *the relative proportions of one part of the head to the other*, particularly in the parts before and behind the line drawn from the orifice of the ear to the top of the head, named by Dr. Spurzheim the anterior and posterior, or the frontal and occipital regions; also in the proportions of the base and upper regions of the brain, as shown in the annexed figures.

By a reference to the figure A,* also to the line as drawn from the orifice of the ear to the top of the head, observing the proportions before and behind the line, also the proportions above and under the lines marked 1, 2, 3, and 4, it is manifest the greater proportion is before the line, from the orifice of the ear to 5; hence it is inferable that the individual so organised will act under the influence of the superior feelings and sentiments, and form one of the respectable part of society.

* See p. 32.

A

This is the case with the whole of the casts we have of this class of individuals, being nearly 1400, from living persons, some from the humble, but the greater proportion from the middle and upper walks of society.

By reference to the figure B, observing the same rules by the same numbers, also the proportions in the same manner, it will be manifest the greater proportion is the reverse of the other, being behind the perpendicular line. Individuals so organised will be found to act under the influence of the lower feelings and animal propensities. The casts of the criminals, being upwards of 150, we have in the collection, have all this description of organization.

In making observations, as here pointed out, and in making deductions, it is not to be inferred, in the event of finding individuals thus organised, that they will, from natural inclination, destroy their fellow men; but one thing will be found,

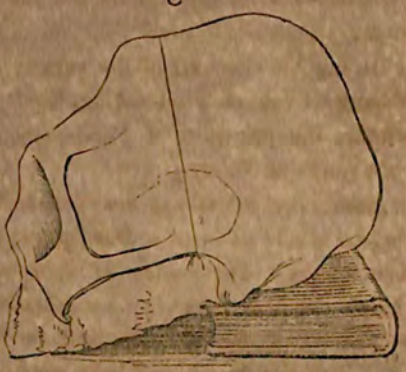
that if, from pecuniary difficulties, supposed injuries, or other adventitious causes, the passions become roused, or provocation takes place in any way touching them personally, the consequences will be unpleasant, if not hazardous, to those who irritate or oppose them while in such a state. *They lose the better part of man, and their feelings say,*—

———"Tempt not my swelling rage
With black reproaches, scorn, and provocation."

In pursuing our inquiry into the character of the national examples of skulls, where we obtain them authentic, the truth of these doctrines is most singularly borne out. We have now in the collection about 500 of this class.

In thus pursuing our inquiry into the national variety, as before observed, it is curious to see the different manifestations of the cerebral parts of the organizations. The figure

C



c is taken from the skull of a Carib, *mentioned by many travellers as the cruellest race.* It is borne out, as will be observed, by the great portion behind the line drawn from the orifice of the ear to the top of the head, and by the small proportion before.

By attending to the same rules, and observing the portion before the line in the figure D, a good proportion is found. This figure is taken from the skull of an American Indian, whose character is known to be far superior to the Carib, manifesting very superior mind and talent to the other. Here we find a good portion of the brain before, to reason and

D

carry on operations with, which bears out the science in the same manner.

In thus tracing the character of the various national examples, it becomes an extremely interesting inquiry, most beautifully illustrating the principles of Phrenology, and the great variety in the works of Nature.

Another point requisite to pay attention to is the frontal sinus, but which is seldom found so large as to prevent Phrenological observations. The organs which it most interferes with, and which should be taken into consideration in drawing conclusions, are Form, Size, Weight, and the lower part of Individuality. This has been considered to present a difficulty, but not of that magnitude which the anti-Phrenologists have represented; the observations daily made on those organs proving it otherwise.

To give some idea of the frontal sinus, we here give two cuts, E and F, which represent parts of the skull, just above the bridge of the nose to the lower part of Eventuality.

Figure E is taken from one having a large frontal sinus; the two tables of the skull at this part being separated, give a full appearance. Were this to be often the case, difficulties to the same extent would certainly exist; but it is seldom found so We have examined many hundreds of skulls, and found very

few: even then some allowance may be made, and the deductions therefrom accurate, by those who have given the science a little study.

Figure F is a different kind of frontal sinus; the bone in front of it appears much thicker, and not so high up: we have found some like this on examining the skulls of old persons. This would not interfere to any extent in Phrenological observations.

It is also requisite to attend to the temporal ridges on the sides of the head, there being at times a muscle that extends along from the anterior part of Acquisitiveness to the posterior part of Secretiveness, at times taking in part of Ideality and Cautiousness. When this is supposed to exist, the eye must not be entirely depended upon, but the parts must be carefully felt: indeed it is always most prudent to rely rather upon an examination by the touch than by the sight only. Persons inclined to be lusty are the individuals who are the most likely to have the muscle large, and such cases require care when making observations.

The figure G represents the muscle on the side of the skull, which can only be observed by the touch. This is taken from a cast in our collection, with the muscle on one side and taken off on the other.

There is another point requisite to attend to. Sometimes

G

there is found a thickness of bone on the median line, in the coronal region, commencing at the posterior part of Benevolence, and extending through Veneration and Firmness to the lower part of Self-esteem, but seldom further, which gives the appearance of width or largeness to those organs, particularly Veneration, which is in general found the thickest.

These particulars attended to will give facilities in drawing inferences from the organization.

The two next cuts show the great difference between the configuration of the forehead of a great man, and that of a natural-born idiot. The one marked H is taken from a mask of Dr. Benjamin Franklin, whose talents as a statesman and philosopher are well known, and which are borne out in the figure and busts of him.

H

The other cut, marked I, is from a cast taken from a natural-born idiot, a native of Amsterdam, in the 27th year of his age.

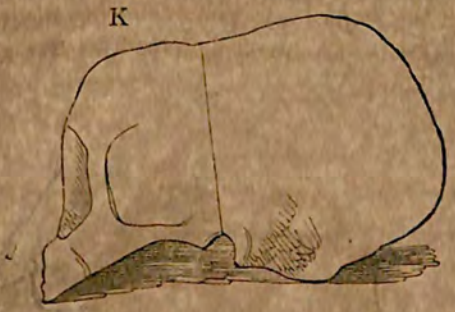
I.

This wants no description to point it out; any one at a glance will see the difference. Between these two extremes the great varieties of character we meet with are found. *Certain it is, we do not often meet with a Franklin or an idiot.*

Many persons, looking at the busts of Franklin and the idiot, have said, any one may see that is the bust of a great mind, when looking at the former, and that is an idiot, when looking at the latter; but, upon inquiry why they thought them so, have not been able to explain: *that appears to be left to the Phrenologist to do.*

The two next cuts, K and L, are introduced to show that a great difference of form exists, and that a corresponding difference in the character also is to be found. The one marked K is taken from the skull of a Celt, and is very remarkable for its length and flat shape.

K



The other, marked L, is taken from the skull of a German, remarkable for its singular flat shape and height.

L

These are introduced, like the figures K and I, to show that great differences of form exist, being two of the extremes. It should also be observed, that they are now shown as specimens of the nations to which they have belonged, but for the extremes of difference in the shapes. Various kinds of character may exist under these extremes of shape, according as the proportions may be found in the anterior and posterior regions of the head. We have some in the collection from living persons, of highly respectable characters, not much unlike these, but having in both shapes the greater proportion before the line.

One thing may be observed in meeting with individuals thus organised: if we met with individuals of either shape, having the greater proportion behind the line, as shown in figure K, we must acknowledge we should not like to live under their government; they would be summary, show a want of good feeling, and require the restraint of the laws to hold them in obedience: while, on the other hand, if either of them had the greater proportion before, as shown in figure L, no such fear need be entertained, neither would such caution be required. *In making observations on casts of individuals thus organised a little more care is requisite than in ordinary cases.*

In addition to these observations, the constitution and the temperaments must not be overlooked. Dr. Spurzheim, in his work on character, and Mr. G. Combe in his works, emphatically and judiciously insist upon the necessity of their being attended to, with the view of estimating the quality of brain. There are four temperaments, namely,—the Lymphatic, or Phlegmatic,—the Sanguine,—the Bilious,—and the Nervous.

Those partaking of the lymphatic indicate slowness and weakness in the vegetative, affective, and intellectual functions; those of the sanguine are easily affected by external impressions, and possess greater energy than those of the former; those of the bilious manifest great general activity and functional energy; those of the nervous, rapidity in the muscular actions, and great sensibility.

PROPENSITIES.

Order 1*st.—The affective Faculties, or Propensities.*

The first nine organs are considered as affective faculties or propensities, are common to man and animals, and are as follow: Amativeness; Philoprogenitiveness; Inhabitiveness, or Concentrativeness; Adhesiveness; Combativeness; De-

structiveness; Secretiveness; Acquisitiveness; and Constructiveness.

To facilitate an inquiry into the functions and actions of these organs, is it not important to distinguish what is their development as affective faculties, and what as propensities?

Certainly: it is of great importance to know whether they are acting as affective faculties or as propensities; as the former, they produce only desires, inclinations, or instincts; but the name propensity is applied to internal impulses, which invite to certain actions. It is therefore highly requisite to inquire into their tendency as affective faculties and as propensities.

What is their tendency as affective faculties?

As affective faculties they should be considered as creating desires, and thereby producing some of the finest affections, which may be classed under four heads, viz.;—*the social affections*, which arise from the perception of amiable qualities, personal or mental in others, for whom a strong predilection is formed, as in the conjugal relations;—*the filial affections*, being the result of a sense of perpetual care and of feelings of kindness;— *the fraternal affections*, which owe much of their strength to the closest habits of intimacy, the perception of one common interest, and an impressive sense of the inestimable value of domestic harmony:—and, *the friendly affections*, which are cherished by the contemplation of pleasing qualities and the perception of a similarity in disposition. Hence the importance of an inquiry into the tendency of the social affections, it being under those feelings that the little plans in the humble walks of life and society, previous to marriage, are carried on by concert; and small communities are kept together by the tie of sociability and reciprocal love, exhibiting one of the most beautiful pictures in human nature. Moreover, when acting under the influence of the affective faculties, the mind dwells upon the accomplishments which have inspired the

affections, recals the scenes of past pleasure, anticipates those which are to come, and, in the expressions of those feelings, it purposely prolongs the phraseology which best prolongs the fascinating idea. Such will be the actions of those organs when in combination with a full development of the moral sentiments, being most particularly observable when a passion or a strong affection is not raised suddenly, but is produced by deliberation or meditation upon the subject.

Having described their tendency as affective faculties, will it not be desirable to inquire into their tendency as propensities, with their effects, and how they may be controlled?

Certainly, it will be desirable; for as propensities they may act from internal impulse, which invites to certain actions: and as passions give place to more permanent affections, with a moderate development of the moral sentiments, they will act under the influence of resentment, when every species of aggravation will be deliberately dwelt upon, every thing in the conduct of the aggressor which may augment his apparent culpability, and every part of his demeanour will be brought forward to demonstrate the greatness of the offence; and therefore it is of the utmost importance to endeavour to hold them in check or in a state of subordination to the moral sentiments.

Then it appears of importance to know their tendency as propensities. Will it not also be desirable to be able to ascertain with certainty their practical tendency as affective faculties, or as propensities, and to point out the impropriety of suffering them as the latter to be our guides?

An inquiry into the practical tendency of the propensities, the final causes and usefulness of our being endowed with them as affective faculties, and the irregularities, confusion, and misery, consequent upon their development as propensities will clearly evince the truth of a position advanced, that the passions or propensities, considered in themselves, are not calculated to be our guides and directors in our pursuits after

well-being: for although there may be a pleasing and apparent highly beneficial diversity in the indulgence of some of the propensities of human nature occasioned by incidental circumstances, yet the legitimate influences of such circumstances are and must be very circumscribed. Were we in every case to listen to the suggestions of the propensities alone, they would lead us into a course directly opposite to that of happiness—they would plunge us into every extravagance, and be the means of exposing us to every calamity.

It appears that mankind will be liable to many errors if governed by the propensities—will it not be important to have their development pointed out to us, so that we should in ourselves be aware of their state of activity, that the consequences and calamities they tend to may be avoided?

It certainly becomes a most important question to ascertain whether we are destined, by the constitution of our nature, to be incessantly exposed to unhappiness, and to be agitated by evil and pernicious passions, without suitable means to oppose them. Are we thus to be driven into every danger by their impetuosity, without a compass to point out where we are going, or a pilot to direct our course? If this were the immutable destination of man, we should inevitably suffer greater calamities than those to which inferior natures are exposed. In fact, no one ever seriously supposed it to be the destination of man that he should be solely governed by his propensities. The most ignorant will sometimes perceive that human beings possess rules of action, by attention to which they are able to avoid many calamities. Hence the importance of a knowledge of the state of the development of the propensities.

From those observations, does it not appear, that those acting under the influence of the propensities are aware of doing wrong; that they are the subjects of folly and tormenting passions; and that they are also aware that it is to the moral

sentiments they must appeal, as their guides and directors over the propensities?

Those who yield the reins to their impetuous passions will often acknowledge that they are doing wrong—that they are inconsiderate—that they are acting unwisely and without reflection. When we behold others the sport of folly or of tormenting passions, we all unite in the accusation that they are acting irrationally—that they violate the dictates of their own understanding—that they are acting in opposition to their better judgment. To the high moral sentiments, as powers of a superior nature, we look for control over the propensities and passions: they are destined to guide them into the right course, and to control every propensity that is irregular and pernicious. It is to the moral sentiments we look forward as guides in the pursuit after our well-being, in combination with enlightened intellect.

Then from what is ascertained of their actions as propensities, it will be desirable to direct them as affective faculties; and that a thorough knowledge of their functions is of the utmost importance, thereby to enable us to govern and hold in command the propensities with a proper observance of, and obedience to, the organic and natural laws?

"The faculties of our mind," says Dr. Reid, "are the tools and engines we must use in every disquisition; and the better we understand their nature and force, the more successfully we shall be able to control and apply them." This is borne out by a vast number of facts that have come within our own knowledge, but more particularly from casts in our own possession, of individuals who have had them taken at different periods; when, from perceiving by the first cast that the propensities were in too great a proportion, when compared with the moral sentiments, advice was given and acted upon, and a total change of character of a high moral order took

place; when compared with which upon taking the second casts, four, five, and six years after, a corresponding change had taken place in the form of the head at the coronal region, which was found to be much larger, and in several cases the lower propensities had got much less. The casts here alluded to were all taken after 28 years of age. This, to some of our readers, may appear strange; but such is the case—and facts are stubborn arguments, and most fully illustrate, that, by proper observance of the organic and natural laws, by the aid of Phrenology, great changes can be produced, even at late periods of life, in the organization of man: hence a knowledge of the relative and actual state of the propensities must be highly useful. This knowledge emphatically imposes upon man, as a high moral duty, the necessity of henceforth discontinuing to act under the blind influence of the propensities.

The first nine faculties give merely desire, and may be properly called propensities, and are as follow: 1, Amativeness; 2, Philoprogenitiveness; 3, Inhabitiveness, or Concentrativeness: 4, Adhesiveness; 5, Combativeness; 6, Destructiveness; 7, Secretiveness; 8, Acquisitiveness; and 9, Constructiveness.

1. "*Amativeness*, produces sexual love."*

This propensity, when fully developed, is one which takes a very active part in society, and in the general character of man. It is in man, and in animals in general, largely developed. Nature seems thus to have fully endowed man and animals with this organ for the noblest of purposes—that of strengthening sexual attachments, and the multiplication of their species.

* In giving an account of the uses and abuses of the organs, I have felt I could not do better than avail myself, in most instances, of the description of the functions of the organs so ably given by Mr. George Combe, in his 'Constitution of Man,' pp. 46—9. 5th edit.

When fully developed, in combination with the moral sentiments and Adhesiveness large, it leads to the strongest mutual affections. The history of some of the South Sea islands enables us to glance at society in some of its earlier forms, and to mark, in some striking examples, the inviolable fidelity of social love, and the results of the manifestation of these organs. If in addition to the above, Philoprogenitiveness and Inhabitiveness be fully developed, it leads to an exclusive and indissoluble union; and the sweets of domestic life make ample amends for its more severe engagements.* To man, love is the source of many other social enjoyments and important advantages—love, or a strong affection, for a particular woman, is, to young men, one of the greatest incentives to virtue and propriety of conduct.

A young man in love thinks that the eyes of his favourite continually behold him; through this amiable medium he views all his actions, and even his thoughts. His affection is so great that he, in some measure, is deterred from regarding any other woman, and, what is of more importance, from indulging in any loose or irregular habits. The dispositions of the female are the same with those of the male; her attention is completely engrossed, and she seldom thinks of any one but him who is the object of her affections.

> "For sure of all the pangs that lovers feel,
> The worst with thee, solicitude, was born;
> To love, and yet not dare that love reveal,
> Or, if reveal'd, to dread a killing scorn."

A young man and woman in love exhibit one of the most amiable pictures in human nature: such is the result of this faculty, when fully developed, that it forcibly reminds us of the following lines from Pope,—

* Repetition of marriage appears to us the result of this combination. We have several casts of individuals in the collection who have married a second, a third, and even a fourth time, all having these organs very largely developed.

"Let mutual joys our mutual trust combine,
And love and love-born confidence be thine."

Individuals having this organ small are very sparing in their observations on affection or love, and in their attentions to female society, which they avoid as much as possible. When found in combination with the other propensities large, and the sentiments and reflective faculties small, it leads to many unpleasant occurrences. Many of the casts of criminals in the collection are striking illustrations of such organization.

The organ of this faculty is situated at the lower posterior part of the head, and when large gives a fulness to that part between the mastoid processes and the occipital bone. Its seat is the cerebellum.

In making observations upon it, care must be taken that the thickness of the neck be allowed for; also the mastoid processes and the occipital protuberance.

2. *Philoprogenitiveness.*—Uses: Affection for young and tender beings.—Abuses: Pampering and spoiling of children.

This propensity signifies the love of offspring generally; and, when large, it gives a drooping appearance to the back part of the head.

This organ is found much more developed in females than in males; it is by the excitement and activity of it that the tender care shown to offspring is strongly manifested. Females having it large, with Benevolence and Adhesiveness also fully developed, upon separation from their offspring, or children they have had under their care for a time, express much uneasiness: some, upon separation by death, or otherwise, bewail their loss almost to derangement.*

When this organ is very small, individuals so organised are

* A remarkable instance of this took place in a female (a case of bigamy): upon being separated from her children she became deranged. On taking the cast of her head, we found *the organ much warmer than any other part of*

much annoyed by the presence or company of children, taking much pains to avoid them; and, at times, even expressing dislike to live in a house where they are; and if Benevolence is moderate, with the propensities largely developed, they manifest even unkindness of feeling towards them,—at times punishing them severely for slight offences. The cases of infanticide proceed from such developments: 30 examined by Drs. Gall and Spurzheim were found so.

Those having this organ and Benevolence large, with the moral sentiments fully developed, express much anxiety for the welfare of children, and are strongly attached to them, taking much pains to seek proper objects for their amusement and instruction, feeling gratification when they are enabled to do so. If Gaiety be fully developed with the above, it gives a disposition to playfulness. Individuals so organised will soon be discovered in their visits to families, as children quickly flock around them.

It is a faculty that is in general largely developed in most nations; even the Caribean Indians, the most brutal of the Indian tribes, exhibit great attachment to their children. How different the character of the American Indian in this particular! Adair and Hunter, who have written largely on the Indian nations, (and other travellers confirm their accounts,) state that numbers of their children die for want of common parental care. The casts of the Caribs have the organ very large, the others very small.

This faculty is very largely developed in many kinds of animals.

3. *Inhabitiveness*, or Concentrativeness.—Uses: It gives

the head; the pomatum, used to lay down the hair, ran off like oil, while the rest of the head remained moderate. Nesbett, while in prison, expressed great anxiety for the future welfare of his children, imploring protection for them of every person he saw. Both had the organ very large. See case of Insanity in Appendix, p. 170.

the desire of permanence in place, and renders permanent, notions and ideas in the mind.—Abuses: aversion to move abroad; morbid dwelling on internal emotions and ideas, to the neglect of external impressions.

It is situated at the back part of the head, between Philoprogenitiveness and Self-esteem.

Some difference of opinion has been entertained respecting the fundamental power of this organ. In the observations made by Dr. Spurzheim on it, he was led to believe its functions to be in animals a desire of inhabiting determinate places. It is a circumstance known of him, that he could distinguish the different species of grouse by merely looking at the back part of the skulls of them: he could pick out the ptarmigan from amongst the skulls of red grouse and partridges. From observations, he showed it to be large in those animals, and in persons attached to particular places, and who dislike change of residence. Others call it Concentrativeness. Concentration of thought, or the continuous application of the mental powers in a determinate direction, appears to us to belong to the intellectual faculties rather than to originate with and be dependent upon any one animal propensity. Being among the propensities, if a fundamental power, its situation presents a difficulty. One of the great beauties of Phrenology appears to us to consist in the arrangement as now made of the propensities, sentiments, and the rest of the fundamental powers, though Mr. R. Cox has certainly shown it is not yet perfect.

Moreover, we have taken the pains to make a large collection of casts to satisfy ourselves, with a view of coming to more proper conclusions: amongst which we have some who have no power of concentration, not even of holding a second idea in view, but they have the organ very large; and what is equally remarkable, as evincing their attachment to place, one of them sold his house, and bought it again twice, not liking

to leave it. We have others, whose power of concentration, and also of maintaining two or more powers in simultaneous and combined activity, so that they may be directed towards one object, are known to be great; and it is equally remarkable, they have the organ moderate. One of those having it small, on our inquiring how his feelings were, and explaining our opinion of its functions, when large, being the attachment to place, expressed astonishment that any one should be found with such a propensity as a strong love of place.

The result of our inquiry is, that Inhabitiveness is the more proper name of the organ. Considering, when a difference of opinion exists regarding the functions of an organ, conclusions should not be drawn from a few examples; we, therefore, have taken a great number of casts for the purpose, upward of 150. Many of them are very singular illustrations; but all the persons who have it largely developed feel strong attachment to the place they have resided in, leaving it or places where they have been for a while, with reluctance.* Some, having sold or let their residences, purchased them again, not liking to quit or give them up, having such strong attachments to them.

We took the casts of three seamen, remarkable for their skill, and for their powers of going in difficult and dangerous parts of the rigging, at the same time keeping their balance, to the astonishment of those around them. Two of them have the organ very large, the other has it moderate: the two having it large are so attached to their ships, that they declined promotion, one as a captain, the other as mate, for a voyage to the South Seas (which takes from twenty-four months to three years), to wait for similar situations in the ships they had been

* We have casts of individuals who feel great reluctance in changing their apartments, or even their bed-rooms; and who put up with inconveniences rather than change: in all we find the organ large. On examining nearly 30 skulls of cats we have, the part pointed out by Doctor Spurzheim as Inhabitiveness is large in them all.

in for several voyages—(a ship being a seaman's residence). Both of these individuals feel a strong desire to die at their native home: or, if enabled, as they stated, to quit the sea, they should certainly settle there. The other, who has the organ moderately developed, feels no desire whatever for a particular ship or residence, stating it was of little consequence to him what ship he was in, or went in, so that he was comfortable, not having any desire connected with his native home like the others.

We have also several casts of individuals who are not able to go up a ladder; others who cannot stand upon a pair of low steps; and some who turn giddy if they look over a precipice; several even in looking over a staircase become giddy and lose their balance;* all of which have the organ large, and who are most singularly attached to place, some of them to a high degree. In fact, the whole of those we have spoken of, being upwards of 150 (any of which, with the particulars of them, may be seen), are attached to native home, place of residence, or any place they have resided in for a time, leaving it with great reluctance; some even at leaving every place they have been in only for a few days. One very singular instance of this kind is in a gentleman who has a strong desire for travelling: he began at eight years of age, has been six times at Canton, and over most parts of Europe. Upon finding, in the cast of his head the organ of Inhabitiveness very large, we felt it as a contradiction to so strong a manifestation for travelling; but, upon inquiry, he stated that a desire to finish his days at his native home, gave him, with his desire for travelling, much uneasiness; that he always left a place where he had rested a few days, or lived for a while, with great reluctance. Hence, we have no hesitation in our own mind that

* It has been stated by some, that this organ gave, as Concentrativeness, the power of balancing in difficult situations; but we consider that power to belong to the perceptive faculties, if not to the organ of Weight.

the proper name of the organ, No. 3, is Inhabitiveness, the number of casts before mentioned being the basis of our opinion; and no doubt we shall find many more when we finish our catalogue, exclusive of an immense number of observations made and measurements taken. But casts taken from individuals who can be referred to is the preferable mode of proving the functions of any organ with satisfaction; this we have done to a great extent, having upwards of 1400 known and authenticated casts from Nature, above half of them being from well-known living characters.

We have taken the casts of three skulls of the wandering Esquimaux, brought to England by Captain Parry, Lieutenant Manico, and Lieutenant Kendall: in all three the organ of Inhabitiveness is small; also in some roving Tartars, and South Sea Islanders, added to the collection.

4. *Adhesiveness.*—Uses: attachment, friendship and society result from it. Abuses: clanship for improper objects, attachment to worthless individuals. It is generally strong in women.

This propensity is common to man and animals; it is situated at the posterior part of the head, by the side of Inhabitiveness, and over part of Combativeness. When large it gives a round appearance to that part of the head.

From the immense number of casts we have where the organ is large, no doubt remains of its being fully established, and that Adhesiveness or Attachment denotes this special faculty, which presents several modifications; the objects of which are friendship, marriage, society, and attachment in general.

There are great numbers of animals that herd together, form attachments, and live in society; as the wild horse, ostrich, elephant, sheep, goats, starlings, crows, and many others. By a reference to the depths of the ocean we see the chain in

Nature continued; the inhabitants of that vast portion of the globe associate in shoals, from the whale to the minnow. We also find men, in their ruder state, herding together. A reference to the various tribes in the East Indies, the North American Indians, New Hollanders, Esquimaux, and many others, are found associating together in the same manner. But why thus mingling together? Few who have written on the various tribes have ventured to treat the supposed causes of it otherwise than theoretically: it seems to be left to Phrenology to come nearest, and to point out the cause of those attachments: hence it appears, that the instinct of being attached for life, and that of living in society, are but mere degrees of energy; —a lower degree produces attachment to society, a higher degree to an individual through life, there being animals who live in society without being attached for life, others are again attached for life without living in society. The instinct, therefore, of living in community and that of living in family, are modifications of the same faculty. Man belongs to that class of animals which are social and capable of individual attachment through life; and hence it results, that society and marriage are more the effects of an original propensity than of mere human reflection. It seems that this special faculty extends its sphere of activity still farther, and gives attachment to all around us,—whether animate or inanimate.

One of the special functions of this organ is friendship, and love of society in general; it is particularly conspicuous in the inhabitants of mountainous countries. In the Highlands of Scotland, it is the principal stimulus to the formation of their clans; it produces friendly attachment, and is considered to be much stronger in women than in men; when large, with Amativeness and Philoprogenitiveness, it prompts to early marriage.

Amongst the skulls of animals in the collection we find many have this organ large,—the magpies, jays, crows, rooks,

wood-pigeons, horses, foxes, and dogs,—some dogs are attached to their masters against all interest, notwithstanding the bad treatment they receive, while others are not susceptible of this inclination.

5. *Combativeness.*—Uses: Courage to meet danger and overcome difficulties, tendency to oppose and attack whatever requires opposition, and to resist unjust encroachments.—Abuses: Love of contention, and tendency to provoke and assault. This feeling obviously adapts a man to a world in which danger and difficulty abound.

This organ is situated at the posterior part of the head, behind the mastoid process. This is one of the organs upon the functions of which much mistaken opinion has existed, it being thought by many that, when very large, it leads those so developed to be quarrelsome, but which is not always so, its functions being more to contend, defend, and carry the objects of life onward. This faculty, when largely developed, gives the power of encountering difficulties, and when in combination with the superior sentiments, also large, it is then one of the noblest attributes of a manly character. It enables the senator, the barrister, and those situated in public life, to contend for the object they have in view or submitted to their care.

Those having this organ very large, and Cautiousness moderate, will be passionate and at times violent; but if Benevolence be fully developed, it will be of short duration, being by it quickly restrained, particularly if in conjunction with the greater proportion before the line drawn from the *meatus* to the top of the head. If to this be added a large Firmness and Self-esteem, the contentions for self-opinion will be warmly maintained; and as Conscientiousness may be more or less developed, so will the justice of the object under consideration be supported, Combativeness giving the feelings to contend, while Conscientiousness dictates to do it with justice.

If Destructiveness be also large, it will give additional energy to the powers of contention and determination.

If this organ be very large, in combination with the larger proportion of animal propensities, and the greater proportion of the brain behind the line drawn from the *meatus* to the top of the head, Conscientiousness and the reflecting faculties also moderately developed, it then, under disappointment or strong excitement, manifests violence and determined courage; and if Cautiousness and Causality be also moderately developed, particularly the former, then it acts without consideration of the consequences which may follow.

When this faculty is small and the superior sentiments large, with the greater relative proportion before the line from the *meatus* to the crown of the head, it gives feelings of diffidence, always avoiding contentions. Persons so organised seem to want sufficient vigour for the common occurrences of life.

Among the casts in the collection, we know of only two having the organ small, the rest having it full and large.

Dr. Spurzheim states this propensity as active, in different degrees, not only in mankind, but also in different species of animals. There are animals who never fight, while others are fond of it; rabbits, for instance, are more courageous than hares. Even individuals of the same kind differ widely with respect to this faculty; thus one dog looks incessantly for an opportunity of fighting, while another always runs away. The courageous animals have the head between and behind the ears very large. This is an unfailing sign to distinguish or recognise if a horse be shy and timid, or bold and sure. The same difference is observed in game-cocks and game-hens, in comparison with domestic fowls. Horse-jockeys, and those who are fond of fighting-cocks, have long made this observation.

By some, this propensity is considered as the result of bodily strength. There are some species which, though weak,

are fond of fighting; while others, though large and strong, avoid it. Among men, and even among delicate women, we find individuals who are weak, but intrepid and courageous; while tall and robust individuals are sometimes destitute of this propensity.

We have taken the cast recently of a skull of an individual who died through fear of an operation, in which we find this organ the smallest of any one coming within our notice, in combination with a moderate Hope and large Cautiousness. We have also taken the cast of a young man having Combativeness small, (not quite so much as in the above skull,) Cautiousness large, and a moderate Hope, who is perpetually annoyed by fear; also causing much anxiety to his family by the manifestation of fear, hesitation, and timidity, evinced by him. This combination always produces doubts, hesitation, fear, hypochondria, &c.

The casts of the primitive Chinese have this organ moderately developed, and Cautiousness large; while those of the Chinese Tartars, their conquerors, have Combativeness large and Cautiousness moderate. In fact, we have such an immense number of known facts in illustration of this and the whole of the organs, that to give a description would take volumes, having now among our phrenological gleanings upwards of sixty thousand individual facts, exclusive of animals' skulls.

6. *Destructiveness.*—Uses: Desire to destroy noxious objects, and to kill for food. It is very discernible in carnivorous animals.—Abuses: Cruelty, murder, desire to torment, tendency to passion, rage, and harshness and severity in speech and writing. This feeling places man in harmony with death and destruction, which are woven into the system of sublunary creation.

This organ is situated above and round the upper part of the ear. When largely developed it gives a fulness to that

part: at times it occasions the upper part of the ear to project outwards.

This organ, like that of Combativeness, from the name given it by Dr. Gall in his early publications, has given rise to many ridiculous observations. He having found it large in the heads of some criminals executed for murder, in the early stages of the science, called it the organ of murder, taking his data from murderers alone. The casts we have of those executed for that crime warrant his observations. It was natural to suppose the feelings would be revolted when the most amiable and pious discovered that they, as well as the most abandoned, had the organ of Destructiveness equally large. The fact is so; for in the collection very few have this organ small; all the rest having it large.

At the early period of taking casts, there were very few of the whole head taken, except those of criminals, and some casts from skulls of Indians and other nationals; most of the casts that were taken from living persons being masks only: it was therefore impossible to take the same view of character at the time the former or earlier names were given to many of the faculties, as the numerous collections of casts of character now known enable us to do, and to judge of the combinations of the various faculties; for it should be observed, that the faculties at the posterior part of the head take a very active part in the controlling or carrying onward nearly the whole of the other organs, and none more than those of Destructiveness and Combativeness; the latter giving the power to contend and pursue the object, while the former gives energy in the execution.

It is also requisite, as before observed, particularly when Destructiveness is large, to observe the relative proportion of the head before and behind the line from the *meatus* to the crown; for it is a curious fact, that the whole of the criminals in our collection (which amount to upwards of one hundred and fifty) have the greater proportion behind the line, while

the whole of those respectable in society have the greater proportion before it.

The Carribean Indians, the most cruel race at present known, have this organ very large; likewise many others among the national skulls; and the proportions behind the orifice of the ear agree with the characters.

The casts of Bellingham, Hussey, Nesbitt, Williams, Dean, Thurtell, and many others, have it very large; also the proportions large behind the line drawn from the *meatus* to the crown of the head.

Persons fond of hunting, shooting, and all kinds of sports that lead to the death of animals, have it largely developed; likewise those fond of attending executions, cock-fighting, and such amusements as lead to the severe punishment or probable death of animals.

From the above observations it appears that the general tendency of this faculty is the disposition to execute and destroy, *without determining the mode or object*, that depending on its combinations with other organs, and the proportion of brain found before or behind the line drawn from *meatus* to the crown of the head.

Dr. Spurzheim, in speaking of this organ, says, "I think that its sphere of activity is more extended than the instinct to kill. It seems to me that this faculty produces the propensity to destroy in general, without denoting any object or manner of destroying; that it also gives the propensity to pinch, scratch, bite, break, demolish, suffocate, drown, poison, assassinate," &c.

Many animals have a propensity to kill, beyond doubt; and it is more or less energetic in animals of different species, and even in the individuals of the same kind. There are some species which do not kill more than they need for their nourishment; while others, as the wolf, tiger, polecat, &c., kill all living beings around them, and that seemingly for the pleasure

of killing alone. One dog scarcely has this propensity, while another possesses it in a high degree.

It appears to us, that individuals having this faculty largely developed, will display great energy in endeavouring to realise their desires, and that according to the combinations as before mentioned, while those having Destructiveness small, evince a correspondent deficiency of energy, and are not so inclined; indeed, they will take great trouble to avoid witnessing executions or the infliction of anything like cruelty to animals.

7. *Secretiveness.*—Uses: Tendency to restrain within the mind the various emotions and ideas that involuntarily present themselves, until the judgment has approved of giving them utterance; it is simply the propensity to conceal, and is an ingredient in prudence.—Abuses: Cunning, deceit, duplicity, and lying.

This organ is situated on the side of the head, above that of Destructiveness, nearly in a line from the orifice of the ear to the top of the head; when largely developed, it gives a roundness to that part, which may be easily perceived, if Cautiousness, which is situated over it, be moderately developed; but if Cautiousness and Secretiveness are both large, it then gives the appearance of great width to that part of the head. These observations being attended to, this organ may be easily discovered.

This faculty, when largely developed, gives the power of concealing any object or act individuals may have in view, particularly if Cautiousness be full. It is under the influence of this organ, and Cautiousness when large, that the many works of eminent men and authors remain undiscoverable; also the names of authors and inventors till after death. When Secretivenes and Amativeness are large, in combination with the greater proportion before the line from the orifice of the ear to the top of the head, it then gives those peering sidelong glances

so often observed; and when combined with the superior sentiments and Conscientiousness large, it becomes the first secret stimulus of those feelings of intimacy reciprocally manifested between friends, though great length of time may elapse before they are avowed.

If with this organ, Cautiousness, Ideality, and Locality, are large, it gives the poet, author, artist, mechanic, philosopher, and every one connected with invention, the power of concealing in their minds the various matters they have under consideration till the proper opportunity arrives to bring them forward, or submit them to public view. When these faculties are small, individuals have not the power of concealment, and are constantly in the habit of repeating to every person they see their inventions and all they know, and, if Self-esteem be large, taking much credit to themselves for their communication or invention.

It is under the influence of this organ when very large, with Acquisitiveness also, that a strong desire becomes manifested of gathering together property in a private and secret manner, which we frequently hear of, and of secreting money, property, and inventions, through the influence of which much of their value is lost to the person and to the public. It was under the activity of those two organs large, that the memorable observation of Socrates was made to his scholars of his concealment of the sticks he had stolen from his neighbour's hedges.

The cast of Hussey, who was hung for the murder of Mr. Bird and his housekeeper at Greenwich, has Secretiveness and Cautiousness very large ; and is also another illustration, from the fact of his concealing himself and keeping out of the way many months, although a reward of seven or eight hundred pounds was offered for his apprehension.

Luscombe, who was hung at the Devon county gaol, is a singular illustration of comparative deficiency of Secretiveness

and Cautiousness, (these organs being very small in the cast of him,) he having, after the commission of the murder and robbery for which he suffered, put on a coat he had stolen, and cried papers about the streets for the apprehension of the perpetrator of the crime which he had himself committed.

This is another faculty which, like Combativeness and Destructiveness, is in general fully and largely developed, and becomes equally useful when in combination with the superior organs, and the larger proportion before the line; it being only under certain combinations with the greater proportion of the animal propensities that it comes into abuse. It appears that its special function is the propensity to be secret in thoughts, words, things, or projects. The fox is careful not to be observed; the cat, watching a mouse, moves not a limb; sly animals, if pursued, hide themselves; a dog conceals his bone; and cunning persons their opinions and intentions, sometimes even expressing an opinion opposite to their own. The special function seems to be the propensity to conceal, without determining the object or the manner of concealment, that depending on the combination of other organs with it.

8. *Acquisitiveness.*—Uses: Desire to possess, and tendency to accumulate articles of utility, to provide against want.—Abuses: inordinate desire of property, selfishness, avarice, theft.

This organ is situated at the upper part of the temple, on the anterior inferior angle of the parietal bone, between Constructiveness and Secretiveness. It is common to man and animals, their subsistence depending much on it. The special function of this organ is the propensity to gather and acquire, without determining the object to be acquired, or the manner of acquiring, these depending upon other organs.

This is another of the organs which, in the infancy of the science, gave rise to many ridiculous observations. Dr. Gall, having discovered it large in the skulls of thieves, called it

Theft; more recent publications called it Covetousness; but experience and research now determine its proper name to be Acquisitiveness.

This is an organ which is in general fully and largely developed, very few having it small. In the collection of casts, taken from individuals all respectable in society, there are very few that are small at Acquisitiveness; it being an organ that is in general largely developed in the heads of the people of this country, *particularly in the very active part of society.*

It was natural to suppose the impression that would be made by the name first given to it, Theft, more particularly when it was supported by facts.

We have a great many casts that bear out Gall's observations: those of Patch, Puckle, Clover, Haggert, Keppell, Brockett, and many others, are examples of Theft and Covetousness; and it is curious to observe, that it is in combination with the animal propensities, and the greater proportion behind the line drawn from the orifice of the ear to the crown of the head. Thus it is evident, that the organ, when very large, combined with the greater proportion of the animal, as above described, leads to seek the possession of money, property, and any thing coming in its way, without considering the means of obtaining, or the right to the possession, or the risks of the adventure to obtain the same; and according as it may be in combination with other faculties, so will the distribution of the property among their companions be observed. If Acquisitiveness, Secretiveness, and Self-esteem be large, and Benevolence moderate, those so organised will disregard the wants of their companions, although partaking of the dangers with them; they will take means to become possessed of the stolen property, and appropriate the same to their own use. Remarkable illustrations of this combination are the casts of Puckle and Keppell, who, after the robberies

committed by them, obtained the property, and refused to share or give an account of it to their companions; the former was detected in consequence of his refusal of a fair portion of the property to his confederate.

This organ, when fully developed, appears to be *one of the most active of the whole;* and, when in combination with the greater proportion before the line (before spoken of), from the orifice of the ear to the coronal surface of the head, appears to be one of the most useful organs, particularly with good combinations of the moral, intellectual, and reflecting faculties; *it then gives a motive and stimulus to honourable acquirement, and leads on, by perseverance, to the possession of large properties and wealth.* It is to the activity of this faculty, being largely developed, with good combinations, that the great wealth so honourably acquired in this country is to be principally attributed, as those having it large are always more or less speculative. We have casts of several so organised, who are known to be very speculative.

Individuals having this organ small, or moderately developed, will think little of the accumulation of property; and if in the possession of it, or in the receipt of the same, they will distribute it with equal or more freedom than they obtained it, particularly if Benevolence be large: *persons so organised will often forego pecuniary advantages.*

This organ, when large, in combination with the larger proportion before the line, as before mentioned, and Benevolence moderately developed, leads to the acquirement of property, storing and hoarding it up, and seems gratified in accumulation, parting reluctantly with their substance till death. Individuals so organised will often express fear of want. Coins, medals, books, curiosities, pictures, statues, and every description of property, are obtained and accumulated by the manifestation of this faculty in collectors; its primitive function being to give the desire of property, without determining the kind,

or the mode of acquiring it, that depending on the influence of the rest of the faculties. The instinct of property is natural in animals and man,—it was anterior to all legislation. In animals the propensity submits only to strength and force; but man, who is susceptible of morality and justice, determines the laws according to which an object shall become property or not.

Youths having this organ moderately developed, seem to go onward in their pursuits without a motive, while others, having it large, manifest feelings clearly showing a motive for every thing they undertake or engage in. We have seen many, having it small, who are inattentive and indolent in their education and pursuits; while others having it large, pursue every thing with a strong desire to acquire.

The activity of this organ is early manifested in children; those in the habit of observing their actions will find many, who upon having been presented with toys or other things, when the first pleasure is over, take no care whatever of them, while others will put them away, or give them to their parents or attendants to keep, considering them as their own property; the former will be found, upon examination, to have the organ moderate, while the latter will have it fully developed.

9. *Constructiveness.* Uses: desire to build and construct works of art.—Abuses: construction of engines to destroy or injure, and fabrication of objects to deceive mankind.

This organ is situated on the temple: when very large it gives a fulness to that part of the head anterior to Acquisitiveness. This faculty is essential to every mechanical profession, and to all those who in any way require invention in drawing, engraving, writing, carving, sculpture, and all branches of art, and every thing that requires construction or manual dexterity, from the hut of the savage to the palaces of kings; its principal function being to contrive, or construct, without determining

the mode of executing, that belonging to the combination of other organs.

Individuals having this organ largely developed have a turn for ingenuity, and seldom feel at a loss how to contrive, or give directions for any thing they may want to have done; they will also readily contrive and substitute one thing for another: and when in combination with Ideality, Form, Size, Weight, Numeration, Locality, &c., it produces such works as we have heard of and seen by Smeaton, Watt, Rennie, Brunel, and many other mechanicians and engineers of celebrity; but when it, and Self-esteem are large, and the other faculties small, it causes those wasteful expenditures on machinery we so often hear of, without any probable chance of success. It is difficult, nay almost impossible, to persuade individuals so organised that they are wrong, their Self-esteem not liking contradiction in opinion, while Constructiveness is exciting to the execution of a project; and if with these two organs Marvellousness be large, the individual so organised will have many visionary schemes, such as perpetual motion, &c.

Children having this organ, with Individuality, Form, and Imitation large, will at an early period manifest the same by cutting papers, or chalking the place in which they are with rude imitations of trees, horses, &c.

Gentlemen of fortune having this organ large are continually building, or altering their houses, grounds, and places around them. It likewise gives a strong desire for seeing workmen about; and feels much pleasure in giving direction in various works, and laying out grounds and plantations.

Females having it large, will show much ingenuity in cutting and contriving; and, if combined with Form and Ideality, they will display much taste in their articles of dress, furniture, &c., and in the distribution of them. Those so organised will be often called upon by their acquaintances to cut out and contrive for them. The clever milliner of Vienna, spoken of by

Gall, has Constructiveness, Form, Imitation, and Ideality, all largely developed.

Many animals have this organ large: by its aid the beaver builds its hut, the rabbit and badger burrow, and the martin and other birds build their nests: by the aid of it, the American Indian, who has it large, carves his various ornaments, and makes the baskets and other things executed by him. The smallness of this organ in the casts of the natives of New Holland is equally remarkable, as it is well known that they have not the least idea of contriving any thing for barter or sale, or even for their comfort.

Care should be taken in making observations on this organ, as it will very frequently be found higher up than it is generally represented on the bust, being often found joined with Ideality, the two organs appearing as the continuation of one. This is the case in the casts of several engineers we have in the collection.

* *Alimentiveness.* This organ, when full, appears to give a proper appetite for food; but when very large, it leads to gluttony, tormandising, dissipation, and habitual drunkenness. If very small, it predisposes to epicurism in eating and drinking, as well as to moderation in diet.

Alimentiveness is situated in the middle lobe of the brain, anterior to Destructiveness, marked with a + on the bust.

It early occurred to Drs. Gall and Spurzheim that the appetite for food is an instinct, not referrible to any of the other recognised faculties of the brain, and therefore they were disposed to view it as a primitive power, having a distinct organ with a distinct function. Dr. Spurzheim, in his dissections of the brain in London, in 1825, pointed out the part of the brain assigned to this organ, having a correspondence with many of the carnivorous animals; but, with his usual caution, stated that he must consider it conjectural, until a sufficient number of

facts was collected, and urged us to a careful but diligent accumulation of them.

This we hope we have done to such an extent as to warrant us in fixing the situation of the organ; and, from the facts collected, we feel that when the organ is full, and the subject in health, it gives what is called a good regular appetite for food and drink as proper nutriment, without gluttony, epicurism or fastidious delicacy. When very large, it leads to gormandising, gluttony, and drunkenness; and if very small, it induces epicurism in eating and drinking, with moderation in both.

In confirmation of this, when full, we have a great number of casts of persons whom we have known for many years, whose habits as regards food and drink are familiar to us, which bear out the views we have advanced.

In illustration of the organ very large, we have a great many cases. A few of them we shall state.

I had, in my own employment, upwards of 20 years, a joiner who was afflicted with an enormous appetite; two pounds of dressed meat, with bread and vegetables in proportion, were considered by him a moderate meal. Being fond of roast meat, his almost regular occupation, on a Sunday morning, was cooking his dinner. He was always in constant employment, and at high wages, being a good workman; but the quantity of food consumed by himself kept him poor; he was a sober man. That part of the brain, the seat of this organ, is very large.

I had also an apprentice who was an immense feeder. He was not particular as to quality, so that he had what he called a good allowance. The quantity of soup, into which he always put potatoes, or other vegetables, which he took at a meal, was so much that at times we were alarmed for his health. That part of the brain, the seat of this organ, is very large.

I have two persons in my employment, 1840, of voracious appetite and thorough good feeders: that part of the brain allotted to Alimentiveness is large in both of them.

I have the cast of a friend, who was a great drinker; he would take a great quantity of ale, wine, or mixed liquors, and spirit and water, without producing intoxication, or apparently affecting him; but his friends are of opinion it shortened his life. That part of the brain is large in him.

I have also the cast of a gentleman who was a great feeder, but a much greater drinker, particularly of wines and spirits; the quantity he drank of the latter at last killed him. That part of the brain assigned to Alimentiveness is large in him.

We have also the cast of a convict who was sent to New South Wales; viz. John Thomas. After his arrival there he became a notorious bushranger, and a desperate fellow, having committed a great many robberies in a most cunning and artful manner during his working in the fields. He became acquainted with a shepherd, formed a criminal connexion with his wife; murdered the husband, who was also a convict, cut him in pieces, and hanged his mangled remains on a tree. The Natives discovered them by the scent. He was apprehended; the murder brought home to him, and he was hanged. While under sentence, and appearing penitent, he extorted from the clergyman a promise, which was, to allow him one hearty meal before he left this world; which was granted; when he ate 3 pounds of beef steaks, 17 eggs, bread and butter, &c. That part of the brain, the situation of this organ, is very large. His age was 26. He was hanged at Sydney, in 1829.

We have another criminal hanged at Sydney, Thomas Allen, who was an extraordinary gourmand, eating up all the scraps the others left. That part of the brain, the situation of this organ, is very large.

We have also a cast of John Dern, a convict (presented to us by the late Barry O'Meara); he escaped from his confinement at Sydney, became a bushranger, a cannibal, and was an enormous feeder, committing some extraordinary and desperate

acts. That part of the brain, the situation of this organ, is very large.

We have also a cast of a boy, 10 years old, who became a petty pilferer and liar to gratify his voracious appetite, picking things up in the street and eating them. The quantity eaten by him being enormous. The part of the brain pointed out as the seat of this organ is very large in him.

Mr. G. Combe has communicated two cases of the organ very large, in the Phrenological Journal of October 1839. Casts of the skulls are in his possession. One of them a cannibal; the other a Dutch officer, who fell a sacrifice to the abuses of Alimentiveness.

We have several cases, which we consider, where the organ is small, bear out the view we take, that it leads such persons to epicurism, and moderation in diet.

One friend, who is moderate in food and drink, but an epicure in old Port and Claret wines.

Another, who is also moderate in food and drink, but an epicure in Madeira and Hock, fancying that he can distinguish whether the former has been or not to the East Indies, and Johannisberg Hock, his favourite, from any other of the Rhenish Hocks. Both those persons are small at the seat of this organ.

We have casts of two persons, who have lived a number of years on vegetable diet, not touching animal food during the whole time. They are both small in that part of the brain the seat of this organ.

SECOND GENUS OF THE AFFECTIVE FACULTIES, CALLED SENTIMENTS.

The following faculties are called Sentiments: namely, Self esteem, Love of Approbation, Cautiousness, Benevolence,

Veneration, Firmness, Conscientiousness, Hope, Marvellousness or Wonder, Ideality, Mirthfulness or Wit, and Imitation. Several of them are common to man, with the lower animals; others are proper to man.

The different organs which give merely propensities are the preceding. These produce equalization of the inclinations, manifest more the emotions of the soul, and are called sentiments.

What are the functions of the sentiments?

Each of the sentiments joins to a propensity an emotion or feeling of a specific kind. Several of them are common to man and animals; others are proper to man.

Are not those endowed with a large development of the moral sentiments in general anxious for the welfare and happiness of others?

Certainly, that is the case; those having a large coronal region, *i. e.* the moral sentiments, are in general very anxious about the welfare and happiness of others; for, however selfish man may be, there are evidently some principles in his nature which interest him in the fortunes of others, and render their happiness necessary to him, though he derives nothing from it, except the pleasure of seeing it. Of this kind is pity or ompassion, an emotion of the moral sentiments, by which we feel for the misery of others, or joy and pleasure, by which we feel a delightful emotion for the welfare and happiness of others, when we either see it, or are made to conceive it, in a lively manner. That we often experience sorrow from the sorrow of others, is a matter of fact too obvious to require any instances to prove it; for these sentiments, like all other original passions of human nature, are by no means confined to the virtuous and humane alone, though they, perhaps, may feel them with he most exquisite sensibility.

If man were seriously inclined to study the nature of the development of his own organization, that is, the state of his

moral sentiments in comparison with the propensities, would it not give him a clue to his own passions and inclinations, and thereby enable him to employ a remedy to correct the defects of his organization?

When man shall be seriously inclined to understand himself and the state of the development of the moral sentiments in comparison with the propensities, let him sedulously endeavour to discover the combination which constitutes his organization; this will furnish him with the clue to the nature of his desires, the quality of his passions, and the bent of his inclinations; it will enable him to foresee his conduct on given occasions; it will indicate the remedies that may be successfully employed to correct the effects of a vicious organization, and also of a temperament as injurious to himself as to the society of which he is a member.

Although but few experiments have been made with a view to learn what constitutes the organization of man, there are still means enough if he would but deign to make use of them —if he would vouchsafe to apply to useful purposes the experience we have gleaned—whereby he would discover that by attention to the *divine law, the natural law, and morality*, he can alter his present character, and thereby his organization.

Are there any known cases whereby attending to what you call divine law and morality, the organization has undergone an alteration?

We have a number of cases wherein casts have been taken at two periods; the latter casts, two, three, and four years after the first, where it has been known the parties have been indulging in low and improper society, but having changed the course of living, and society, and following religious and high moral precepts, a change of form of the head has taken place—the propensities have got less, and the moral sentiments much larger.

Are any of the first causes known which occasioned the change of character in the individuals alluded to?

Certainly not: our province has been, and now is, to endeavour to learn what are the effects arising from causes; nor can we, when guided solely by our own speculative ideas of cause and effect, instead of observation, predicate what will happen, otherwise than as it has usually happened in similar cases; for our knowledge of God and his proceedings is very imperfect at best. He has given us experience and a capacity for observation to correct our errors in theory from time to time;—"it is true, we cannot enter into the counsels of God, nor discern his manner of proceeding; but we may reason upon them, in many cases, with a clearness that shall work a full assurance upon the mind to the exclusion of all doubt, as even experience or demonstration can do upon points with which we are well and intimately acquainted."

What are we to understand as the design of divine law, which having been attended to, has improved these organizations?

The design of *divine law* is, that man should inquire into those rules which Nature prescribes to him in order to conduct him safely to the end, which every one has, and indeed ought to have, in view, namely, true and solid happiness: the assemblage of these rules, considered as so many laws imposed by *God* on man, is generally distinguished by the name of *natural laws*, the proper observance of which is productive of the most beneficial results,—as is evidenced in the changes of the form of the head, indicative of an improved organization in those who have been so fortunate as to have been induced to obey them.

Sentiments.

What are the attributes of the moral sentiments?

They tend to show the necessity and advantage of a high moral conduct in the heads of families and preceptors, thereby

leading others to the duty and practice of virtue, and to a sensibility of feeling.

The situation of the sentiments must strike every one, who duly considers the subject, with admiration (nay adoration) of the works of a Supreme Being: they are emblems of the high moral points of character of man, and are situated on the highest part of the head, the coronal region.

10. *Self-esteem.*—Uses: Self-respect, self-interest, love of independence, personal dignity.—Abuses: Pride, disdain, overweening conceit, excessive selfishness, love of dominion.

This organ is situated on the posterior part at the back of the head, on the middle line from front to back, being under Firmness and above Inhabitiveness: when large it gives a roundness of appearance to that part of the head, particularly if Approbativeness and Inhabitiveness be largely developed.

In taking a view of this organ, it appears to us to be one which takes as active a part in the character of man as any of the whole series; hence, according as it appears large or moderate, with modifications or combinations of the other organs, and with the relative proportion before or behind the line from the orifice of the ear to the crown of the head, so will the individual character partake of its influence.

This organ, when very large, and the reflecting faculties moderately developed, disposes men to be partial to themselves, and esteem others only in their own image; and excites every one so developed to exclusively consult his own interest and preservation, giving him a good opinion of his own personal qualities, and taking pleasure in placing himself before others:

> "Kind self-conceit to some her glass applies,
> Which no one looks in with another's eyes;
> But, as the flatterer or dependent paint,
> Beholds himself a patriot, chief, or saint."

The man of sense, equally with the fool, entertains the

same complacent ideas of himself, each in his way; exhibiting frequently arrogance, haughtiness, vanity, frivolity, and ostentation, which will appear in various shapes, according to the difference of the combination of the other faculties, education, rank, fortune, and the society in which he is placed, which will be apparent according as Cautiousness, Combativeness, and Destructiveness may be more or less developed. The former being moderate, and the two others large, the actions of this organ will be continually annoying by manifesting a determination to have the mandate obeyed, without considering the consequences.

Under the above combination it cannot bear opposition, and seems only to approve of that which, by a sort of tacit agreement, has entered into a man's feelings, that every one shall love only that to a certain degree which he thinks worthy of or in himself, and it seems to become deaf and blind to everything but what he admires, (his standard being his own supposed perfections,) which prompt him to think that his own conviction of their existence is sufficient to render them equally discernible to all.

How different is the individual that happens not to be so organised, but who has the reflecting faculties large, with a good proportion of the moral sentiments, and the greater proportion before the line! he will feel like many of the ancient philosophers.* That these fundamental principles, deduced from Nature by the most acute, and confirmed by the daily experience of every attentive observer of mankind, throw a light on many ludicrous appearances, which are constantly to be seen around us, or observed in history, which appears to be little more than an account of men's infirmities and defects,

* "Pride (says Selden in his 'Table Talk') may be allowed to this or that degree, else a man cannot keep up his dignity. In gluttony there must be eating, in drunkenness there must be drinking; it is not the eating nor is it the drinking that is to be blamed, but the excess.—So *in pride.*"

many of which arise from too great a proportion of this faculty with certain combinations; but what science, previous to Phrenology, could point out the why and wherefore of all this difference of character in man?

An able writer on the human mind, who took an extensive view of man, says,—"Man looks upon himself as the centre to which all created beings tend. Among the pismires inhabiting this mighty mole-hill, there have been always some who could not discard the idea, that the sun only shone for them to bask in; that the starry worlds were nothing more than golden studs placed for the sake of ornament in the firmament; and that the whole of this system was created solely for the supply of their wants, the gratification of their senses, and the amusement of their imaginations."

Experience points out to us daily the correctness of these observations, and none more so than when this organ is very large, and the individuals labouring under derangement; they then frequently fancy themselves emperors, kings, queens, &c. Tilney Mathews, who died in Bethlem, styled himself an emperor, and made drawings, which showed the singular influence of this organ and Marvellousness. An individual in the hospital at Paris fancied himself a king, dressed himself in a ridiculous manner, sticking stones, buttons, toys, and other things about his dress, calling them jewels, and commanded those around him to obey. Two females we have seen dress themselves in the same ostentatious manner, who labour under derangement; we have examined them, and found Self-esteem in both very large.

This organ, when large, combined with the reflecting faculties, Combativeness, Destructiveness, and Approbativeness, leads man on to some of the noblest actions and deeds recorded,—it inspires confidence in one's self,—it produces the power even of resisting time—an emulation of one's self, to surpass by new deeds our former ones, and to eclipse, by

greater merits, those which are already acknowledged to belong to us: hence it appears that a due proportion of this faculty, with good combination of others, gives us the power to exalt ourselves above the weakness of human nature, to exert our talent in praiseworthy enterprises, to obey the dictates of our conscience, to smile under misfortune, and to rely, through perseverance, on seeing a change.

Different nations have this faculty more or less developed. Excite this faculty by admiration of their acts, &c., and you will receive caresses and favours; offend or place it in a supposable menial occupation, however trifling, and you will as quickly meet repulse.

Upon the whole, the activity of this organ is to be seen prominent in most nations. The Greenlander, who laps with his dog in the same platter, despises the invader of his country, the Dane. The Cossacks and Calmucks possess the greatest contempt for their masters, the Russians. Ask the Indians, who live at the mouth of the Oronoko, from what nation they derive their origin, they answer, "Why *we* only are men." In short, there is hardly any nation in which instances of the activity of this organ do not occur.

It appears that certain animals are endowed with this organ, as the turkey-cock, peacock, horse, &c.

11. *Love of Approbation.*—Uses: Desire of the esteem of others, love of pride, desire of fame or glory.—Abuses: vanity, ambition, thirst for praise independently of praiseworthiness.

This organ is situated in the upper lateral posterior part of the head, on each side of Self-esteem, and when very large gives a squareness of form to that part.

Every person of understanding, who has given attention to his own conduct and that of others, has in his mind a scale of good or evil more or less exact. He makes an estimate of the value of reputation, self-approbation, and the approbation of

others, which have a comparative importance in his cool and deliberate judgment.

When largely developed, it directs our attention to the opinion which others entertain of us, and produces the love of fame, praise, emulation, and, in combination with Self-esteem and Firmness, vanity. It is this faculty that appears to make us conscious of pleasure in the eyes of others, and also makes the case of those who think and talk of self. It loves to be caressed, flattered, and applauded: persons endowed largely with it are very anxious, and take great pains to obtain the approbation of others. It is more developed in females than males, and much more amongst some nations than others. It is one of the organs that seems interwoven in the English character, being *one of the strong motives for most of our actions, whatever means we may take to conceal the fact*, and has contributed largely to raise this country so much above all others in the scale of nations.

The love of approbation or notoriety may lead to war or peace, indolence or industry,—to vice or virtue, and to every kind of action, good or bad, according to the excitement and activity of other organs in combination with it, and according to the object approved of by those having the direction or control of others.

It is in general largely developed in the English, and when in combination with the superior faculties, largely developed, it leads on to noble actions. The love of notoriety excites the statesman to seek the approbation of his sovereign, the servant of his master, the artisan of his employer; and it is one of the greatest excitants to almsgiving.

There are many animals that have it largely developed, such as horses, dogs, cats, &c., which are sensible of the caresses bestowed on them.

12. *Cautiousness.*—Uses: It gives origin to the sentiment

of fear, the desire to shun danger, and circumspection; and it is an ingredient in prudence.—Abuses: Excessive timidity, poltroonery, unfounded apprehensions, despondency, melancholy.

This organ is situated on the upper part of the side of the head, between Conscientiousness and Secretiveness; it occupies a large portion of the brain, and when large is easily observed, giving to that part of the head a squareness of form.

This organ, when fully developed, gives the inclination to look around upon circumstances, and to consider well the object before making a decision, and thus becomes very useful in the common affairs of life. No amount of intellect or endowment of the moral sentiments will, perhaps, altogether compensate for the want of a due relative development of this organ. When very large, it produces doubts, hesitations, and indecision, seldom, within a moderate space of time, fixing on anything under consideration, but more frequently putting off the answer or determination for the morrow, particularly if Combativeness and Destructiveness be moderate.

Individuals having this organ and Secretiveness also large are in the habit of concealing their opinions from view for a great length of time, seldom giving them till extracted from them, often by artifice or taunting; those so organised at times conceal their real opinion to their own injury, and often to that of others; and if, with those faculties large, Hope be moderate, they will be prone to suspicion, and are often subject to despondency, though, perhaps, seldom outwardly shown. When small, and Secretiveness moderate, it produces a volatile feeling. Persons so organised are unable to keep a secret, and often are imprudent in hasty observations. Its special function, when fully developed, produces precaution, demurs, places sentinels, and continually exclaims, *Take care;* and produces the hesitations expressed by *but;* and when too

active, it causes uncertainty, irresolution, anxiety, fear, melancholy, hypochondriasis, &c.

Many animals have it large: it produces circumspection in them, as the stag, roe, pole-cat, otter, mole, &c.; also those which place sentinels to warn them of approaching danger, as the chamois, cranes, starlings, bustards, &c.

The skulls of the wolf and deer are remarkable for their development of this organ; the former has it small, and Destructiveness large; while the latter has it large, and Destructiveness small. The deer is known to be a shy, timid animal, and the wolf bold and ferocious, often approaching the habitation of man in search of its prey.

13. *Benevolence.*—Uses: Desire of the happiness of others, universal charity, mildness of disposition, and a lively sympathy with the enjoyment of all animated beings.—Abuses: Profusion, injurious indulgence of the appetites and fancies of others' prodigality, facility of temper.

This organ is situated on the superior part of the forehead, between the two parts of Imitation, also on the middle line between Comparison and Veneration; it is easily observed when large, giving a fulness and roundness of appearance to that part of the forehead.

This organ when large takes a very active part in the character, and is one of the most amiable possessed by man, properly applied; and it has been a subject much discussed amongst philosophers from very remote periods—whether man is entirely selfish in his actions, or whether any of the sentiments in his mind determine him to the good of others. The Phrenologists consider the faculty to give a disposition to acts of benevolence and compassion; it gives, when full, a mildness and cheerfulness to the temper, and a charitable mode of judging of the characters of others; when abused, it leads to profusion, and when small, it leads to indifference for the welfare

of others. It is a beautiful contemplation to view the powers this noble sentiment is capable of when supported by other sentiments and a good development. Dr. Spurzheim states that it produces goodness of heart, kindness, peacefulness, mildness, benignity, complaisance, clemency, mercifulness, compassion, humanity, hospitality, liberality, and Christian charity. St. Paul gives a beautiful description of it in his account of Christian charity: "Charity suffereth long, and is kind; charity envieth not; charity vaunteth not itself, is not puffed up." One would hardly believe that a feeling so amiable as Benevolence could ever be abused, but such is the case often: the injudicious assessments for the support of the poor, and the sloth and indolence produced therefrom, are natural consequences of it. Many other instances will readily occur to the reader.

As the restraining as well as the active duties of Benevolence are essential to society, our Maker has wisely ordered that the principles that enforce these several duties should be the most cogent of all that belong to our nature: other principles may solicit, allure, or terrify; but the principle of duty commands, and must be obeyed. This will be the case when in combination with the superior sentiments largely developed, and the larger proportion before the line from the orifice of the ear to the top of the head; it being when in combination with the greater part of the brain behind the line that it comes into abuse. Under this combination, the individual so organised would profusely distribute in order to become the hero or delegate of the society in which he moves. Thurtell, Haggerty, and other criminals, are examples of this organization, in combination with the propensities large and the moral sentiments moderately developed.

Hence it will be observed, one of the great purposes of society is to furnish opportunities of mutual aid and support; Nature, seconding that purpose, hath provided the principle of

benevolence, which excites to be kind, beneficent, and generous. Nor ought it to escape observation, that the Author of Nature, ever attentive to our wants and to our well-being, hath endowed man in general with a liberal portion of that principle; it inculcates charity not only to those we are connected with, but to our neighbours, and to those we are but little acquainted with. Thus it appears that the principle of benevolence is not too sparingly scattered amongst men; it is, indeed, made subordinate to self-interest, and which is wisely ordered; but its power and extent are nicely proportioned to the limited or extended capacity of man, and also to his situation, so as the better to enable him to fulfil its objects.

14. *Veneration.*—Uses: Tendency to venerate or respect whatever is great and good; gives origin to religious adoration. —Abuses: Senseless respect for unworthy objects consecrated by time or situation, love of antiquated customs, abject subserviency to persons in authority, superstitious awe.

This organ is situated on the upper part of the head in the centre of the rest of the sentiments; and, when large, taking the head in profile, it gives an arched appearance to that part.

Those having this organ, Benevolence, Hope, and Marvellousness, largely developed, are inspired with a sensation of respect, and when directed to a Supreme Being, experience the sentiment of adoration. It has heretofore been considered that this organ gave the strong sensations of religious feeling, but experience proves that it is not by this organ alone that feeling is excited. Numerous observations now prove that when this organ, Marvellousness, and Hope, are large, and the sentiments fully developed, persons so organised manifest a strong disposition to religious feeling, and may be seen constantly attending to devotion and places of worship.

Dr. Gall found this organ largely developed in persons who showed strong devotion. Lavater had also observed a rising

on the heads of religious persons, also in persons who had chosen the ecclesiastical order from a natural inclination. It appears, from the observations made by Drs. Gall and Spurzheim, that artists, in portraying their conception of this noble sentiment, particularly in numerous instances where Jesus has been introduced, have given to the head a characteristic of pure devotion, in delineating it as a high head and making it full and in unison on both sides, which fact is curious as being illustrative of the phrenological doctrines.* History proves this sentiment, but does not inform us what is the nature of God; because with respect to this attribute mankind have had at all times ideas extremely different. The sentiment manifested by this organ is Veneration in general, without determining its specific application in the choice of its objects: it venerates the aged, the parent, and all that is respectable and adores the Principal of principles, and that to a high degree when in combination with the superior sentiments, and a greater proportion before the line, as shown in the figure.

We have a great number of casts of individuals whose religious characters are well known; and not a single one of them but has the organ of Marvellousness very large, in combination with Veneration, and the moral sentiments also fully developed. There can be no doubt now but that this organization produces the strong feelings of the supporter of, and devotee to, religion and its institutions, but without determining the manner or direction of them, that depending on the combination with other organs.

15. *Firmness.*—Uses: Determination, perseverance, steadi-

* A Phrenological friend of mine has a large collection of the finest engravings demonstrating that artists, when accurate in their representations of persons, particularly in portraits, are always phrenological delineators, even without being aware of it. It is to be hoped the period is not very remote, when he will submit his collection to the phrenological world, with a commentary, for which undertaking, perhaps, no phrenologist is better qualified.

ness of purpose.—Abuses: Stubbornness, infatuation, tenacity in evil.

This organ is situated at the back part of the upper part of the head, on the middle line from front to back, between Conscientiousness and above Self-esteem; when large it gives a prominent appearance to that part of the head.

It seems to be so placed for one of the noblest purposes; being situated in the midst of other powerful faculties, it assists Nature in her designs in strengthening some, and as a check on others. It appears to be so placed to maintain that composure of mind, which, without impairing its sensibility or ardour, proceeds in most instances with firmness and perseverance when fully developed. Combativeness, Destructiveness, Self-esteem, Cautiousness, Hope and Conscientiousness, also large, give the power of following the dictates of one's own mind with firmness through all the varieties of human life, and with a mind always master of itself, in prosperity or adversity, not only when the subjects under consideration affect life, but also when treating questions of minor importance looking onward with justice, determining the object under consideration by firmness.

"No man can be either useful to others or happy in himself, who is a stranger to the grace of firmness, and who is not habituated to prefer the dictates of his own sense of rectitude to all the tyranny of command and allurements of temptation."

Drs. Gall and Lavater made the same observation on this faculty, that those who have a firm and resolute character, have the summit of the head very high and fully developed. A person endowed with this faculty will insist on this or that; but under such feelings, he is not affected by reason, but by the love of command. It is the sentiment which gives constancy and perseverance to all the other faculties, fixes and supports that activity, and gives a disposition to independence; above all, when combined with Self-esteem too active, it pro-

duces abuse, frowardness, commotions, obstinacy, prejudice, the spirit of sedition, &c. When there is a deficiency of this faculty, it renders them inconstant, changeable, and uncertain. It must also be remarked, that the activity of this sentiment does not determine its application, as that depends on the combination of other faculties: in a good and just man, it gives the love of independence; by it the proud man will not obey the command of others, but loves to enforce his own mandate.

16. *Conscientiousness.*—Uses: It gives origin to the sentiment of justice, or respect for the rights of others, openness to conviction, the love of truth.—Abuses: Scrupulous adherence to noxious principles when originally embraced, excessive refinement in the views of duty and obligation, excess in remorse or self-condemnation.

This faculty is situated on the upper part of the back part of the head, on each side of Firmness and over Cautiousness. It is one of the most important of the whole organization. When it and superior sentiments are largely developed, and a due proportion of the animal, it produces one of the noblest works of the Deity, whose hand is no where more visible than in the nice adjustment of our nature to our situation in this world.

Dr. Spurzheim considers this organ to have the particular sentiment of just and unjust, right and wrong, and that a particular organ of justice must be admitted; that no animals have this faculty; and its activity is very different in man, some being all but destitute of it, while others possess it in a high degree, the particular determination of it depending on the other faculties with which this sentiment is combined.

There is not a more pleasing sight in history than the man of integrity and understanding, who, in spite of change of fortune, remains the same in every period of his life; and who sees the necessity of fulfilling every moral duty, and cordially

submitting to the dictates of justice as the ultimate judge in all matters of right and wrong. How different the man who has this organ and the superior sentiments small, and a large proportion of the animal propensities! many such are to be seen in our collection of casts who have suffered the penalty of the law for their crimes.

This faculty also produces a great effect upon the manifestations of the other powers; its sentence makes us guilty to ourselves and in the eyes of our Maker, however strong the propensities act in opposition to it; and it is evident that this sentiment has, from its nature, authority to direct and determine us in regard to our conduct, to judge, to acquit, condemn, and even to punish—an authority belonging to no other sentiment in the human mind. This sentiment requires great care in judging of its powers and combinations, it having so extensive a connexion with, and (when large) an influence over most of the other faculties and propensities; and, being over them, it would seem as if Nature had thus placed it as a sort of barrier, which, like a boundary or fence, when kept up, prevents many fatal accidents, but when neglected, is open to many inroads and unpleasant occurrences.

17. *Hope.*—Uses: Tendency to expect future good; it cherishes Faith.—Abuses: Credulity with respect to the attainment of what is desired, absurd expectations of felicity not founded on reason.

This organ is situated on the upper part of the head, on each side of veneration; when largely developed it produces the sentiment of Hope in general, and happy are those possessing it in considerable proportion, to whom all is fair, and whose prospects of the future are bright and sunny, without a speck or cloud to obscure the horizon. In religion it cherishes the belief in the immortality of the soul. To the traveller, it is one of his greatest comforts when accompanied with per-

severance: it will then say, with Park, when laying himself down in the desert to resign his life,—"Can that Being, who waters and uprears in the midst of desolation, leave man, the noblest of his works, thus to perish?" Hope led the way, and succour and safety were found nearer than had been anticipated.

It strengthens the disposition to look on the brightest side of objects, cheering its possessor, whose feelings say why—

"——— Hope seeks a smoother way,
And dwells on fancies which to-morrow see;
To-morrow comes, true picture of to-day,
And empty shadows of what is to be:
Yet cheated Hope on future still depends,
And ends but only where our being ends."

When very large, Marvellousness also fully developed, it leads to the anticipation of much of that which it is highly improbable—nay, upon reflection, impossible—ever can appear in reality. Dr. Gall thinks that Hope is an emblem of every organ. Dr. Spurzheim distinguishes it from desire in general; and observes that every faculty desires, but every one does not hope. He considers this sentiment as necessary to the happiness of man, in almost all situations, and that its tendency is to lead him to hope for the successful termination of his projects. Hope does not confine itself to the circumstances of this world; its scope extends even to the life to come, and it is disposed to admit the immortality of the soul, and the reality of which the Christian religion inculcates. He also considers this faculty as extremely important, though it is liable to abuse as well as other faculties.

18. *Marvellousness or Wonder.*—Uses: The desire of novelty; admiration of the new, the unexpected, the grand, the wonderful, the extraordinary.—Abuses: Love of the marvellous and occult; senseless astonishment, belief in false mira-

cles, in prodigies, magic ghosts, and other supernatural absurdities.

Note.—Veneration, Hope, and Wonder, combined, give the tendency to Religion; their abuses produce superstition.

This organ is situated a little forward of Hope, between Imitation and Ideality.

This organ, when largely developed, with Benevolence, Conscientiousness, Hope, and Marvellousness, produces strong feelings of respect for the Deity. Individuals so organised are fond of works on Theology, and hold religion and its institutions in much respect; if to those organs Veneration is found largely developed, the persons so organised will be found devotees to religion.

From the great number of casts we have with this organ and Veneration large, and with them small, little doubt remains in our minds of this organ being the principal one that gives the strong feelings of, and attaches those having it large (with the combinations mentioned), to religion and its institutions.

It also gives strong feelings to the man who searches after and sees into the marvellous. It is very prominent in the human species: the savages, as well as civilised nations, show it on many occasions; also people who give to their founder any original fiction, which they propagate by their marvellous accounts; also to persons who are amused by fiction, and all that is wonderful, surprising, mysterious, or anything that is done by miracle; these sentiments being believed by the magician, he sees inspiration, presentiments, phantoms, and demons; and by the astrologer, visions and witchcraft. It contributes a good deal to the faith in religion, by the belief in mysteries and miracles; in dramatic productions it introduces spirits, and the representation of all that is supernatural; and when very active, it believes in seeing and understanding visions, or fancies it is accompanied by spirits.

"Strange things, the neighbours say, have happened here.
Wild shrieks have issued from the hollow tombs;
Dead men have come again, and walk about;
And the great bell has toll'd, unrung, untouch'd!
Such tales their cheer, at wake or gossipings,
When it draws near the witching time of night."

Such will be the feeling of this faculty when large, and the reflecting faculties small. This organ and Hope act often together, and have a particular way of expressing themselves separately or in connexion: Hope looking on the pleasant side, while Marvellousness is searching for fiction.

The works of Jacob Behmen, Swedenborg, and the mystical writers, are dictated by the feelings given by the activity of this organ, according to the various combinations of other organs.

19 *Ideality.*—Uses: Love of the beautiful and splendid, desire of excellence, poetic feeling.—Abuses: Extravagance and absurd enthusiasm, preference of the showy and glaring to the solid and useful, a tendency to dwell in the regions of fancy, and to neglect the duties of life.

This organ is situated on the side of the head, between Hope, Marvellousness, and Acquisitiveness. It inspires enthusiasm, and searches everywhere for perfection and the ideal, and that is why it is called Ideality.

Individuals differ very much in regard to the development of this faculty: according to its energy and activity, poetry is prized or relished; it gives a particular tinge to all the other faculties, and makes them in every thing aspire to Ideality. It produces with Marvellousness the sentiment of the sublime and beautiful, and gives the spirit of imagination to the works of those authors who are allowed to be good poets. When large, it inspires with rapture, prompts to embellishment, is essential to the architect, sculptor, painter, and to every art dependent on invention; without it, the productions of the mind may be useful, but will always be deficient in grandeur of conception, and splendour of execution, and will want that

glow of fancy which enlivens and beautifies the object of its research.

In common life, we may easily distinguish those who have it from those who have not a considerable development of it, the former speaking in an elevated strain of language, and, when animated, show a splendour of eloquence and of poetical feeling, while the latter are never able to command attention.

Dr. Spurzheim considers the peculiar direction of it as depending upon the combination of the other faculties; that it is common to the genius of poets and authors, and contributes the primitive sentiment, by which they are endowed with their power. He says, this sentiment does not produce the versifying nor the rhyme; some authors write in prose in a poetic manner; others make verse without rapture, which is expected in the poet; when in activity it exalts the imagination. This faculty matures the taste for the sublime, inspires enthusiasm, and searches everywhere for perfection and for the ideal.

In making phrenological observations on this organ by itself, or in combination with the other faculties, we must be cautious in judging of those, in whom it has been much exercised, in admitting their sensations as realities, and in attaching any more credence to their statements than an enlightened judgment will justify; beyond this, is the province of fancy, which pays but little regard to things as they really exist in Nature.

Dr. Gall, when he first discovered this organ, called it Poetry, having found it large in all the poets he met with. Many who have taken a superficial view of the science, view it in the same manner, from which many ridiculous observations have been made on persons having it largely developed, and not being authors or poets. The extensive collection of casts formed, and observations made, prove the proper functions of this organ, and fully demonstrate that every person having original invention is under the influence of this organ; and

as the inventions are found to have more or less of the ideal and the grand, so will the organ of Ideality be found to be more or less developed.

20. *Mirthfulness, Gaiety or Wit.*—This organ gives the feeling of the ludicrous, and disposes to mirth.

It is situated on the exterior part of the forehead forward of Ideality, and on each side of Causality.

This organ in former publications was called Wit; but, by very extensive observation made, Gaiety seems to be its more proper name. From extensive research, we find all those having it fully developed have a turn for gaiety and cheerfulness, giving to their conversation a lively feeling, and pleasant manner in the whole of their transactions, unless restrained from outward manifestations of it by very large Cautiousness, which when large, restrains the expression of many of the organs. Persons who are known to be wits have this organ large; but it is in combination with several others, namely, Ideality, Imitation, Individuality, Eventuality, Melody, Comparison, and Secretiveness large, and Cautiousness and Causality, particularly Cautiousness, moderately developed. We have several casts of persons who are thus developed, and who are known to excel in wit, repartee, and imitation. Those having Benevolence very large also pass their jokes and make their repartee, attended with cheerfulness, humour, and a kindness of feeling; while others, having it moderate, with Secretiveness, consider little of the consequences, often delighting in passing their jokes to the annoyance of some one present, and employ these means to hold them up to ridicule.

We have a great number of casts in illustration of it, as Gaiety, giving cheerfulness to the manner in every thing the individuals are engaged in; but few of those are known as wits.

Dr. Spurzheim, in his former publications, spoke of this organ as one of the intellectual faculties; but in his later works he considers it as a sentiment.

Wit, in the general acceptation of the word, consists of conceptions formed by the higher intellectual powers connected with this sentiment. Humour consists of a manifestation or representation of the propensities or sentiments under the colouring of wit; in many of its powers it is greatly assisted by Comparison and Imitation. Dr. Spurzheim says, men who excel in wit and repartee, like Voltaire, Piron, Rabelais, Sterne, John Paul, &c.; have the upper exterior part of the forehead, marked 20 on the bust, very fully developed. He considers the faculty of wit consists in comparing objects and ideas, and in discerning similitude or dissimilitude, but tha he does not consider it a comparing faculty, at least that comparison is not its distinctive function; but that there is a particular manner of comparing or looking at the objects that appertain to him or her. Its tendency is that of exciting to gaiety and cheerfulness; it combines itself with comparison, and produces that which amuses in the comparison; exact or inexact, it can apply itself to words, ideas, objects, phenomena, arts, and all the manifestations of the other faculties, and searches out all the pleasant sides; it enlivens the conception of the musician, painter, poet, and orator, as in puns, caricature, mockery, raillery, irony, ridicule, and all that depends on the ludicrous conceptions.

21. *Imitation*—copies the manners, gestures, and actions of others, and appearances in nature generally.

This faculty is situated on each side of Benevolence, on the superior part of the forehead.

A true knowledge of Nature gives us great pleasure; but a lively imitation of it, either in poetry, painting, sculpture, and many of the fine arts, must produce a much greater; for those

arts are, when well executed, not only true imitations of Nature, but representations of Nature in its best possible form. To the mechanical and various other arts, this faculty, when large, becomes highly useful and advantageous. Dr. Gall received the first hint of the existence of this organ from examining the head of one of his friends, who possessed the power of imitating in a surprising degree, and was, indeed, a perfect actor. He also found it large in many others. Persons having the organ large, when they mention a fact, or relate an anecdote, imitate the voice, look, and gesture, of those they are describing or the object described; so that by imitative powers it is easily discovered and described. Imitation is of the first necessity to actors, but it does not make a comedian or tragedian: that depends much on the combination of other faculties. Its circle of activity is very great, in combination with other faculties.* Infants have it more generally developed than adults, it being known they learn many things by imitating and repeating that which they see others do. In many individuals, where this faculty is predominant, in combination with good time and melody, it gives them the inclination and talent for accurate pronunciation. It imitates the voice and gesture of animals

* "When they (teachers) have so (profoundly) studied Phrenology, they will discover that one branch of it offers them great assistance in training, which to the uninitiated, and the mere reader of Phrenological books, actually appears ludicrous when first mentioned. I allude to the *Natural language of the faculties.* The maxim is very ancient, Si vis me flere, dolendum est primum ipsi tibi. If you wish to excite me to weep, begin by weeping yourself. If you wish to train any faculty in a child, exhibit the activity of it in your own countenance, tones of voice, gestures, and language, and you will rouse it into action in him. *The formation of habits, by a repetition of action, is the aim of training. Teach the child to exhibit the Natural language of the faculty, and the very act of doing so will call up the motion.* If you find a child cross and ill-humoured, and you induce him to utter some kind speech to one of his companions, expressive of benevolence, and to suit the action to the word, to smile and look benignant, and to use soft and tender tones, you will find that his crossness cannot co-exist with this effort, if successful. It arouses benevolence, and he becomes, for

and of men, and produces, in the arts, what is called expression, in which Raphael excelled. Many birds imitate the cry and singing of others. These faculties are essential to theatrical representation, and appear to be given to man as a source of amusement to parties; they act in combination with the other intellectual faculties, and their nature appears to be effective.

The skull, said to be that of Raphael, has this organ and the whole of the sentiments largely developed, and is in accordance with his conceptions of the ideal, as is clearly manifested in his sublime representations of the Deity.

THE FIVE SENSES.

Our senses inform us that external objects exist; we see them, or feel their influence. In our observations on the senses, we shall not take up too much time by dilating on those of feeling, taste, smell, or hearing, it being the province more of the physiologist than the Phrenologist.

But the sense of sight having immediate connexion with the brain, that comes within our province. We admit the views in general taken of four of the senses; namely, by the sense of

the moment, what he seems. If the action be often repeated, the emotion will become permanent. The physiological explanation is simple. *The Natural language is to the faculties what sound is to the ear; it rouses them into action.* The idea of teaching children to act the Natural language of the Faculties which we wish to cultivate, may appear, as I have said, ludicrous to many persons, but the Creator has given us a capacity for acting, a faculty, which enables us to call up the natural expressions of emotions when we want them,—it is Imitation; and why should this power, divine in itself, be applied only to buffoonery, or mischief? Most parents repress the talents of imitation in children because it is so often misapplied as to create enemies. I propose to direct it to its legitimate uses." See Mr. G. Combe's Address to the Boston Phrenological Society, U. S., Dec. 31st, 1839, pp. 20-1, and note to Preface herein, p. 14.

touch, we discover whether the object be soft or hard, rough or smooth, sharp or obtuse; by the sense of taste, we perceive that things are bitter, sweet, sour, &c., and the peculiarities of their flavour, though even this perception may be connected with Alimentiveness; by the olfactory nerves, we are made acquainted with specific odours; by the auditory nerves, we learn whether, and to what degree, bodies are sonorous; and by the optic nerves, we perceive the existence of bodies. We agree even with the metaphysician, that the eye may be the medium of perception; but we go further, and contend the brain is the medium by which we are enabled to judge of the comparative sizes, their forms, colours, and situations of objects.

These are facts of which we acquire an immediate knowledge by our senses. The impressions they make are so strong, it would be superfluous to reason upon the subject; and we feel assured, prior to any exertion of the reasoning powers, no man will take the trouble of proving to himself the reality of his own existence: he will readily assent to the truth of the axiom when stated, that whoever thinks, feels, and acts, must exist; but he will not suspend his sensations until he has proved the point; and few find it necessary to draw a formal inference, that if they see something, there must be something to be seen; if they hear a sound, that it must proceed from some sonorous body. Every one will confess that the existence or sensible qualities of bodies cannot be known *à priori*; and, moreover, that we should have remained ignorant of them, without the powers of sensation and the sense of sight.

It is commonly supposed that the art of painting is dependent upon the sense of sight: it is certainly true, that the eyes are necessary to perceive colours, as ears are to perceive sounds; but the art of painting no more consists in the perception of colours than music in the apprehension of sounds. Sight,

therefore, and the faculty of painting bear no proportion to each other; the sight of many animals is more perfect than that of man, yet they do not paint; and even amongst mankind, the talent of painting cannot be measured by the acuteness of sight. Great painters never attribute their powers to their eyes. They say, it is not the eye, but the understanding, which perceives the harmony of colours, which is fully illustrated by the cases annexed of Milne, Offley, and Sandys.

Mr. Milne cannot distinguish a blue from a scarlet, yet he has a fine sight, and executes extremely small and minutely delicate mechanical works, observes objects at long distances, can read a scale of minute divisions without the aid of a magnifying-glass; and writes a neat small hand without the aid of spectacles, at nearly sixty years of age.

Mr. Offley has the same power in observing minute and delicate objects; but, as a proof of his want of discrimination of colours, he felt great anger at his wife having, as he imagined, a scarlet silk gown on, when it proved to be a puce or dark lilac.

Mr. Sandys was an artist of celebrity, making very beautiful lead-pencil, ink, or drawings in one colour; but never could accomplish one in various colours, and in an attempt, coloured the foliage of some trees light red for green.

Mr. Inglis, son of the Bishop of Nova Scotia, Mrs. Frankland Lewis, and Admiral Bullin, brought persons to us who were not capable of distinguishing colours, as tests of our judgment in the science, *making a condition that the face should be covered before we made our observations;* in all of whom we pronounced they had not the power to distinguish one colour from another. We have had many such cases, and have many casts proving this fact. In all the cases the organ of colour is very small.

From these considerations, it follows, that many intellectual

faculties which have been attributed to the five external senses do not belong to them.

Human testimony is an extensive source of information; without its aid we should remain entirely ignorant of every event and transaction which preceded our existence, and of every occurrence which takes place, or has taken place, at any distance from us, or that is not within the compass of our personal knowledge; we therefore beg attention to the cases which have been mentioned, which must convince any thinking mind of this truth, that it is not to the eye alone that the power of perceiving sensible qualities belongs, but that it is the medium through which the communication is made with the brain, that being the organ by which we judge of minutiæ,—forms,—size,—weight or momentum,—numbers,—order, &c.

The facts already collected present us with such a multiplicity of evidence, that they severally corroborate each other, and form a continuity of proof which is irresistible, as our previous illustrations show,—and demonstrate that the eye is only the medium of perception, but that perception itself is dependent upon other organs situated in the anterior portion of the brain, and, without which, the organ of sight would be almost, if not entirely, useless, for all practical purposes.

INTELLECTUAL FACULTIES.

The next region of organs is situated in the forehead, and contains the Intellectual Faculties. Their power consists in the mind's capacity to accumulate and generalise its ideas, in order to take a comprehensive view of all the evidence or relations appertaining to a subject. They are divided into three regions, namely,—First, the perceptive faculties, which are situated on the eye-brows, the superciliary ridge; they make us acquainted

with every individual object, and its physical quali[ties] cannot be brought well into operation without the use [of] eyes, around which they are beautifully situated, and have [been] found by dissection to be in direct communication with [the] optic nerves. Their names and functions are as follow: viz. *Individuality*, the faculty of perceiving separate or distinct existence—individual beings—substantives;—*Form*, of perceiving configuration;—*Size*, of perceiving dimensions—bulk—magnitude;—*Weight*, of perceiving momentum—impetus—force—resistance;—*Colour*, of perceiving colours;—*Number*, of perceiving quantities, as a multitude of units, two, ten, twenty, &c.;—*Order*, of perceiving—physical arrangement.

The second region of intellectual faculties is situated immediately above the others, in the middle of the forehead; they are more of a combined nature, and give us the idea of the different relations of various objects: their names and functions are as follow; viz. *Locality*, the idea of relation of place—relative positions—local distance;—*Eventuality*, the idea of phenomena—visible quality—events—facts—new appearances;—*Time*, the idea of duration—and rhythm;—*Melody or Tune*, the idea of music—sweetness of sound—harmony;—*Language*, the idea of human speech—distinct tongues—arbitrary signs—words. They are more of a compound nature, rank somewhat higher in their quality, and are situated a little higher up in the forehead.

The third or upper region of intellectual faculties is found in the upper superior part of the forehead, over the second region: *these faculties* partake of a much higher quality, and are called the reflective faculties; they give the power of thinking and judging deeply, are two of the most important in the whole series, and when fully developed with good combinations constitute man one of Nature's noblest works. Their names and functions are, *Comparison*, the faculty of judging how things differ from or agree with something else—of comparing by analogy and

ude of relations;—*Causality*, the faculty of judging of agency of a cause and of appreciating causation.

Upon due reflection on the various situations in which we find the intellectual faculties, every rational being must be struck with awe, nay veneration, at the works of the Supreme Being: this must cause the sceptic to pause and reflect; for be it remembered that the construction of the grand fabric, *i. e.* the brain, is not the work of man nor of the Phrenologist; it is that of a higher power; the discovery of its functions is all the Phrenologists claim, and upon which they now take their stand, and invite their opponents to prove them in error, not by words, but by facts; for the Phrenologists set more value upon one fact than upon a multitude of words. *Res non verba quæso.*

Supposing the intellectual faculties to be moderately developed from neglect, illness, or otherwise, do you consider it possible that they may be improved by admonition or example and exercise?

Certainly, we do so consider them capable of improvement, and that impressions made upon our minds by admonition, experience, and example, though they may have a remote efficacy towards forming active habits of intellectual employment, yet they can have this efficacy no otherwise than by inducing us to such a course of action, as to form those habits; and it must be always remembered, that real endeavours to enforce good impressions upon ourselves are a species of virtuous action. However, the thing insisted upon is, not what may be possible, but what is the fact, the appointment of Nature, which is, that active habits are to be formed by reiterated exercise. Thus, by accustoming ourselves to any course of action, we get an aptness to go on with facility, readiness, and often with a pleasure in it, thereby removing many of the imaginary difficulties; and thus a new character, in several respects, may be formed, and many habitudes of life, which are not fully developed by Nature, may be acquired.

From what has been stated, would not a better knowledge of

ourselves and the state of our intellectual faculties discover to us how errors at times occur in our understanding and judgment?

From the want of knowing ourselves much better one of the greatest errors that the human mind is liable to arises, viz. false ambition. The man who has never, by a careful examination of his intellectual powers, discovered their imperfection, considers himself a kind of independent being: he sets up his reason as supreme judge, and whatever he cannot comprehend by it he ridicules. Self-examination, and an acquaintance with the nature and extent of the intellectual powers and passions with which we are endowed, would discover the folly and error of that inattention by which our understandings and judgments have been misled. Moreover, a knowledge of our ruling passions and of the weakness of the intellectual powers, and their tendencies, will instruct us how to correct their influence, how timely to retreat from temptation, and how to guard the avenues through which danger, by the want of such knowledge, may assail us.

Have any facts been collected whereby it is shown that by education, or any other means, the intellectual faculties have been materially improved in adults?

Certainly, that is the case. We are in possession of a number of facts, showing that by study the intellectual organs have got much larger; viz. a gentleman residing in the city, having, from an indifferent state of health, and other causes, neglected the higher branches of study, and feeling his deficiency, had a cast of his head taken at 28 years of age; he then applied himself to particular studies recommended by a practical phrenologist for about 3 years, by which a great improvement took place, which enabled him to apply more readily, and with much greater facility and power, to his occupation, and a corresponding change has taken place by an enlargement of the very intellectual organs called into action. *Another case* is that of a gentleman, whose first cast was taken when 30 years of age, who had neglected his studies, and had been giving way to low

amusements: but being roused by the higher monitor within t a consideration of the course he was pursuing, and of his neglec of his professional studies, he went to a foreign country, t get rid of his connexions, for four years and a half, during which time he also applied himself to the study of the law, and with an extraordinary degree of success. Upon his return, a the end of four years and a half, a second cast was taken, and the change that had taken place in the intellectual and moral regions of the head is extraordinary, corresponding minutely with the intellectual faculties and moral sentiments called into action, these having considerably increased; the lower feelings and propensities during the same time having diminished. The character, upon taking the first cast, was written, and advice also given by a practical phrenologist; and upon the gentleman's return to England, a second cast was taken, from which an estimate was also drawn, and the inductions in both instances, singularly corresponded with the actual character of the individual when examined.

Similar cases of improvement have also occurred where casts have been taken at two different periods; in one case at 31 and 37 years of age, in another case at 38 and 42 years of age, and in a third, at 41 and 46 years of age, in all which a change or enlargement of the intellectual organs had taken place, corresponding with the new acquirements made during the time. In fact, we have 140 casts, taken at all periods of life, showing changes to have taken place, with very material alterations of the individuals' characters. This correspondence has been found in all those cases where second casts have been taken.

The following front views of Mr. G. Bidder will fully demonstrate that by neglect of education and of moral direction a deterioration of the intellectual organs takes place, and that, by a change of direction of the faculties and with successful education, they again change, and an increase takes place.*

* We may, consequently, infer that encephalic modifications are constantly going on, either for better or worse: hence, we cannot be surprised at

No. 9 is from a cast taken at 8 years of age; here the reflecting, with a very few of the intellectual, organs are large; but in No. 10 and No. 11 the reflecting organs are deteriorating

9 10

and receding. During this period (8 years) no education was going on; the consequence of which is to be seen by the higher

11 12

the constant alterations of character occurring, in all ranks, classes, ages, and in both sexes; alterations, utterly inexplicable, except by the light which Phrenology affords.

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faculties getting less, but with a slight increase in the perceptive organs. At this period, 16 years of age, he is taken by the hand, placed at a good school, and is constantly in moral and intellectual society: about 3 years after the cast, from which No. 12 is taken, it is evident what a fine expansion of the whole of the intellectual organs had taken place. From that period to the taking of Nos. 13 and 14 he had been engaged in high

13 14

intellectual pursuits, and we find the expansion had gone on in the whole of the intellectual organs—this was during a period of nearly 9 years—but which is better observed by reference to No. 15: the lines *a a a a* being taken from the last cast, No. 14, the lines *b b b b* being taken from the fourth cast, No. 12; the increase forward being near half an inch at the reflective organs, a diminution having taken place at the same time in the propensities. Here is a clear proof of a diminution having taken place in the higher or superior regions of intellectual organs during the first 8 years, when his education was neglected, and a fine increase of the whole of the intellectual organs during the latter period, when education was successfully going on, and his occupations were of an intellectual character.

15

[*These engravings have been taken by an instrument and correct measurements from the casts.*]

22. *Individuality*,—takes cognisance of existence and simple facts.

This organ is situated on the lower part of the forehead, between the lower part of the eyebrows. It comes early into action, particularly in children: infants in their nurses' arms, soon begin to take notice of persons, particularly those who notice them, to whom, at an early period, they return their smiles.

Every one who has the opportunity of seeing children cannot fail to remember their early notice, which is owing to the fulness of this organ: in those not so fully developed, the reverse will be seen; many are and may be seen who take little or no notice till much further advanced in age.

The love of variety, or curiosity of seeing new things, seems woven into the frame of persons having this faculty large. We usually speak of it as one of Nature's levities, though planted within for the solid purpose of carrying forward the mind to

fresh inquiry and knowledge : strip us of it, the mind, I fear, would doze for ever over the present page, and we should all rest at ease with such objects as presented themselves within the province where we first drew breath. In youth and in manhood it becomes powerfully useful, being the organ that excites curiosity, observation, and assistance in the acquirement of knowledge. Many persons are met in society, who know something in almost all the arts and sciences, and who are never at a loss to speak on such subjects, though not deeply; such persons may be called abridged encyclopedias; to which character a large development of this part of the brain seems to give them a peculiar claim. It is a most useful and valuable addition to a head; it is necessary to the philosopher, poet, artisan, and to the acquirement of every branch of art and science. When combined with Locality and Eventuality, it assists the botanist, mineralogist, and naturalist. If this organ be very small it leads to inattention to practical details, forgetfulness of individualities, and a deficiency in practical talent. Animals possess the faculty large.

23. *Form*—renders man observant of form.

This organ, when largely developed, is one of the most useful to the artist and mechanist, in every branch of their trades or professions, giving power to discriminate and judge of forms. It is one that is readily observed : when largely developed, the eyes appear wide apart; when so, the eyes are pushed out laterally, giving an appearance of great width to the bridge of the nose. It is a very important endowment for the amateur, particularly to those who collect paintings, sculpture, or any description of works of art.

Animals have it large : some dogs and the elephant have given striking examples of their knowledge by this faculty. It varies very much in animals and in man : some people have no recollection of persons again, though they have seen them fre-

quently; while others remember the figure of those they have seen but once, and that a long time before; persons and other exterior objects being distinguished one from the other by Form. This faculty, in a general manner, comprehends all that which is Form, and separates it from Individuality, because, although we may be disposed to represent each being, like God, invariably under one form, yet the faculty of Individuality cannot act without the least idea of Form. The organs of Individuality and Form are adjacent, and situated in the internal angle of the orbit. The French have it large, also the Chinese. It is essential to the portrait-painter, the sculptor, engraver, and all those that make comparison of forms in their works.

Many persons, not professed painters, and even children, may be found, who are constantly scratching with pen and pencil, and cutting the forms of men and animals out of paper: in all those a great width will be seen between their eyes. This arises from the large proportion of the brain, situated on the mesial or inner side of the orbitar plates of the frontal bone. As this organ is intimately connected with the profession of a painter, a few observations on the causes of the difference of style, colouring, conception, drawing, &c., may not be out of place here. To be a first-rate painter a powerful assemblage of organs is necessary: there must be Form, Imitation, Constructiveness, Colour, Ideality, Locality, Comparison, and Causality; but how seldom can we expect to find such a combination in the same individual! and hence the great dissimilarity in subjects chosen, &c., arises from the greater or lesser development of one or several of the organs in each. The painter who has Form large will be celebrated for the accuracy of his drawing; he who has Locality will devote his talents to landscape painting; he who has Ideality will aspire to the more sublime subjects, and often paint allegorically; he who has Colouring may

be celebrated for the beauty of his tints, but condemned for his bad drawing; with Constructiveness he will finish with the delicacy of hand we see in the Flemish school; but will sometimes, unless endowed in other respects, give an appearance of stiffness and laboured execution. Hence, while we admire their handiwork, we often lament that it has been so ill bestowed. There are a thousand other observations, but it will be needless to swell the page with more of them; let an able phrenologist see a painter, he will be at no loss to speak of his favourite subjects, his powers of conceiving, copying, &c. &c.

24. *Size* gives the idea of space, and enables us to appreciate dimension and distance.

This organ is situated immediately under Locality, on the inner angle of the eyebrows; and, when largely developed, gives a heavy appearance to that part of the brow.

This organ was for a length of time considered as not fully established; but from the great collection of casts taken and observations made, no doubt now remains in our minds as to its functions or situation, having a great number of casts of persons with it largely developed, who are known to possess great accuracy in judging of size and dimensions.

Many persons are seen, who have great facility in estimating size, and in whom the powers of distinguishing forms and relative position are not equally strong; and in them, that part of the brain mentioned as the situation of this organ has been observed to be very large. These examples, the great number of casts we have collected, and other facts, leave no doubt of its functions and situation being fully established.

We have met with many persons who have great power in judging of measurements; they will give the length, height, or size of any object, with great accuracy: many persons in

the country will give the size and quantity of land in a field in the same manner: such persons will be found to have the organ of Size largely developed.

25. *Weight* communicates the perception of momentum, weight, and resistance, and aids equilibrium.

This organ has hitherto been spoken of as conjectural; the observations made, and the casts taken, not being heretofore sufficient to pronounce with certainty on it. A great number of casts having been taken of those known to possess the power of judging of weight and resistance, and finding the organ largely developed in the whole of them, no doubt remains of the organ or the situation of it, which is near the organ of Size, under Locality; and when this and Size are largely developed, they give a heavy overhanging appearance to that part of the eyebrow. Persons who acquire great facility in judging of momentum or resistance, of friction, and in mechanics, are observed to possess the part of the brain lying near the organ of Size largely developed. We have casts of several captains, and those known to have excellent judgment in the navigation of ships, in calculating the power or resistance these vessels meet with in a beating passage, in stemming, as they state, tides and currents, in readily pointing out on a chart a ship's situation, and in reckoning a ship's way in a beating passage, have this organ large: hence, from the great number of observations made, and from the number of casts taken, no doubt remains as to its being now fully established, and its situation is as stated above.

Dr. Spurzheim, although speaking of it, in his *Observations sur Phrénologie*, as conjectural, always spoke with confidence of there being a distinct organ which takes cognisance of weight, resistance, friction, &c.

We find this organ largely developed in many of the pugilists, particularly those who have been successful, and which seems

highly requisite to give them power to judge not only of the force they have to resist and to parry, but also the force of the blow they intend to give.

26. The organ of *Colour* gives perception of colours and their harmonies.

This organ is situated on the middle of the eyebrow, and, when large, it rounds the arch of it; which configuration of the eyebrow is more certain than when the arch is direct in height and developed obliquely to its external angle; so that the external angle is more elevated than the internal. Several metaphysicians and physiologists were aware that a person may have very acute vision, and yet be destitute of the power of distinguishing colours; but *habit and attention have, as usual, been adduced to solve the difficulty.** Observation shows those who have great natural power in appreciating colour and its harmonies ave a large development of that portion of the brain situated as above stated, and marked 26 on the bust; while those who cannot distinguish minute shades of colour have this portion of the brain small. The function of this organ is to perceive colours and their shades; it gives, perhaps, what is called taste in their arrangement. Dr. Spurzheim says, the preceding faculties cause us to know the qualities of exterior objects in a higher degree; the colours, although they contribute equally to that knowledge, and to distinguish the shape between them, are yet minor requisites. In speaking of the senses of sight, Dr. Spurzheim states that the sight is not sufficient to feel the harmony of colours, nor for explaining the talent of colouring of a painter. It is true that the eyes cause the light and shadow to be known, and they are affected agreeably or disagreeably; but they do not perceive the affinity between colour, or the harmony or want of harmony. Some persons are deficient in the faculty of perceiving certain

* See note to pages 14 and 92.

colours. Dr. Spurzheim speaks of a family that could not distinguish black from white; Dr. Unzer, of Altona, could not tell a green from a blue; he also met with a person in Dublin, and other persons in Edinburgh, who could not distinguish brown nor green from scarlet; yet all these persons were very clever in their several mechanical pursuits, and had acquired a knowledge of other qualities, such as the dimensions, forms, &c., of objects. In general, there is no proportion between the sense of sight and the faculty of colour, no more than between sight and the power of judging of configuration or of size.

This faculty is more active in females than in males; in some nations more than in others. Some of the eastern people possess it in a high degree, which is manifested by their love of colours. It is this organ which makes the sight of flowers and of a meadow well enamelled so agreeable to the sight of some persons. This faculty is necessary to the flower-painter, the good colourist, the enameller, dyer, and, in general, al those who are occupied with or conversant about colours; but in judging of the organ of colour, it is desirable to notice the difference of development as indicative of excessive activity or that degree of power which is essential to the constitution of a good taste.

27. *Locality* gives the idea of relative position.

This organ is situated above the eyebrows on each side of Eventuality and Individuality, and when large gives a prominent fulness to that part of the forehead. This faculty is one soon manifested in children, and very early shown by them. Infants, as soon as they can walk, are frequently seen passing through different rooms, and going to the one destined for their nursery. This organ, if its manifestations be watched in children, will be seen very active. When large, it gives great memory of places.

Dr. Gall, though he had good eyes, could not discover

places where he had been before. One of his fellow-students, Sheidler, historian of Vienna, when a boy at school, had a surprising faculty of recollecting localities and particular places. Sheidler has a large development of this part of the brain, as may be seen in his cast.

The faculty, when very large, gives a desire to see different places; it particularly notices localities, gives the power to the practical geographer to perceive space and distance, and is a powerful element in the genius for landscape-painting. The expert landscape-painter, having it large, by looking attentively at natural scenery which he conceives would make a good subject for a picture, can go the length of trusting entirely to his organ of Locality, without taking the slightest sketch of the relative positions of the objects. This organ is said to be largely developed in animals, as the horse and dog, and gives them the power of knowing their dwelling-places; and, becoming very active in certain seasons, causes them to migrate. Those persons having it large feel great pleasure in reading voyages and travels.

It is to this faculty, when large, combined with Eventuality and Individuality, that we owe the impatient desire for travelling: the passion is in no way bad, but as others are, in its abuse and excess. Order it rightly, the advantages are worth the pursuit, the chief of which is to learn the languages, the laws, customs, government, and manners of other countries; to acquire an urbanity and confidence of behaviour, and to fit the mind more easily for conversation and discourse; to take us out of the leading-strings of the nursery, and to show us new objects, or old ones in new lights, by contemplating the variety of Nature, and thus learn what is good, and by seeing the difference of so many humours and manners, to look into and improve ourselves. Such will be the effect of this combination of faculties when largely developed.

28. *Number* gives the talent for calculation, &c.

This organ, when large, gives a fulness or elongation to the external angle of the eyebrow. It is one of the faculties that has much occupied the attention of the phrenologists. By some it has been considered to give extraordinary power in arithmetic and mental calculations; and by others, in mathematics. As regards mathematics there are numerous examples to prove it, in those who have shown great powers in that science, and who are very largely developed in the situation of this organ. The examples are very numerous, proving the establishment of the organ. Those having it well developed will be found to possess a fulness at the external angle of the eyebrow, at the part marked 28 on the bust; it is situated by the side of Order, and near that of Time, by which, when large, (particularly with good Order,) it is much assisted.*

In the casts of Sir Isaac Newton, Professor Airey, Mr. G. Bidder, Zerah Colburn, and of several gentlemen who have obtained the honour of senior wrangler at Cambridge, and many others, known to possess great mathematical and arithmetical power, this organ is found to be large.

29. *Order* communicates the love of physical arrangement.

This organ, when large, gives a fulness to that part of the eyebrow beside the organ of Number, giving to it a sort of squareness of form.

Many people are remarkable for the attention they pay to the arrangement of their domestic concerns; for the order in

* Dr. J. Gregory, in his Conspectus, s. 280, judiciously observed,—"Memory is the fountain and source of every kind of science and judgment, and therefore *Order is the chief part of it;* for without it, memory would either be null or vague and quite useless, such as belongs to persons dreaming, or delirious."—This authority is adduced, because we found our experience in manipulation led us to the conclusion, that a good development of Order is an important element in a good *general* memory, —more so than is suspected by most phrenologists.

which furniture, books, &c. are kept. They are distressed to see any thing out of its place, and are keenly alive to all the comforts of local arrangement and order; others again are the very reverse of this, and indifferent to all the advantages which arrangement bestows. The latter will have the organ small; the former large.

Order supposes a multiplicity of objects; but many have the idea of several objects and their qualities without considering them in one order. Some persons are unhappy if there is no order in their apartments, at table, and in every other situation; and there are some that derange the objects of their apartments only for the pleasure of new arranging them. Order may be applied to all other ideas of Dimension, Form, Colour, Time, &c.; *it assists much in Numeration.* This faculty is not to be confounded with the philosophical arrangement of ideas; but it belongs to the classification of objects after their exterior signs; it also gives pleasure in seeing collections complete.

In making observations, we have found this organ developed in three degrees; that is, very large, rather large, and moderate. When very large, it manifests a strong desire to see every thing in its place, and feels annoyed at the most trivial thing being out of its proper situation; and if Combativeness be largely developed the person becomes irritated, often feels and expresses anger at its being so. The fine arrangement we see in some collections is, in a great degree, the result of this state of the organ. When rather large, the individuals so organised feel a strong desire to see things in their proper places, and have good arrangement; but are not so particular as the former, often leaving things until the morrow to put them into their places: persons thus organised feel a dislike when others attempt to arrange their papers, books, or things in their own private studies or rooms. Others, having it moderate, feel a desire to see things in their

proper places, but seldom think of putting them there; while those having it small are very careless where they lay any thing.

30. *Eventuality* takes cognisance of occurrences and events.

This organ, like that of Individuality, is situated in the centre part of the forehead, between the upper part of Locality, immediately under that of Comparison.

This organ was for some time considered as an extension of Individuality. Dr. Spurzheim, having made extensive observations, calls it Eventuality: for the correctness of the name, and the functions he assigns, we can, by the aid of a great number of casts taken, and facts collected, vouch.

Those having this organ largely developed are watchful observers of passing events, also collectors of facts, but do not always go deeply into them; that depending on the state and activity of other organs. When very large, it excites a strong desire to know somewhat of every thing that is passing, and employs such means to gratify the desire as those having it small never think of. Many persons subscribe extra to have, immediately after publication, the periodicals they read; others manifest equal desire to see the papers of the day, and even have them brought to their bed-rooms directly they arrive; many, when travelling, upon arriving at an inn, inquire immediately for the latest papers, and feel uncomfortable till they obtain them. Individuals thus organised feel annoyed and irritable at any one getting the papers and periodicals before them. The general tendency of the organ, when largely developed, is to seek early intelligence, and to watch events and all that is passing. Those anxious to have the newspapers, periodicals, novels, and books they read, early after publication will be found to have this organ large.

We have a great number of casts, taken from known characters, markedly illustrating the above observations. We have

two casts of individuals who have such a desire for reading the newspaper, that they are always on the watch to obtain it, notwithstanding the means taken to prevent their getting it; but so watchful does the activity of the organ appear to make them, it is seldom the means succeed: one of them has even been known to go into the garden after obtaining it, and sit under a bush in the wet to gratify his desire to read the paper first; the other, when a youth, has secreted it till he could get an opportunity of perusing it.

Wyndham, Fox, Ponsonby, and Burke, all had this organ very large; they manifested the power of remarking on passing events in an extraordinary manner. Many of the leading characters of the present day have it largely developed. It is a most useful organ to an editor, historian, statesman, barrister, and all those engaged in or interesting themselves about public matters; for when largely developed in individuals, they notice the incidents and events passing before them, which others, having it small, quite overlook. But it is the largeness of the organ that causes the activity in one, and the smallness of it in the other, that occasions the indifference to the events of the day.

There are some men who have superficial ideas of all human knowledge and events, who interest themselves in any and every thing appertaining to arts and sciences, but who do not study them to the bottom; who know enough to speak with facility on them; who talk well, and are men to whom society gives the name of brilliants; such persons would be found to have this organ large.

Persons having it largely developed know all that is passing around them, and are fond of relating all they know.

31. *Time* gives rise to the perception of duration and rhythm. This organ is situated on the middle line of the forehead, over that of Order, running obliquely from Locality, and when

large seems to form a continuation of the latter, the outer part of it being near to Melody.

From a number of casts taken from those known to possess the power of judging time accurately, and from numerous observations, no doubt remains of its establishment or situation. It gives the power of conceiving time, and of remembering circumstances connected by no link but the relation in which they stand to each other in chronology, and is very different in different individuals.

The nature of Time is essentially different to Number and Order, and may be considered without reference to number; two days ago, yesterday, to-day, to-morrow, the day after, &c., thereby indicating a continuance of a succession of days, without counting their number. Order relates more to objects, and Time more to phenomena; Time includes the notion of continuance, of succession, or of simultaneousness. This organ being situated above that of Order, and being so connected with it, receives assistance *from Order, and Order assistance from Time*, they acting very much together. In observations on those two organs, they should be considered as generally acting more together than separately, though many instances may be seen of Time by itself, and Order by itself. It is to be observed, many persons have good recollections of time without any arrangement or order of it, speaking of dates or periods of time without any particular connexion; while others, speaking of time or dates, are always in the habit of connecting it with circumstances, or particular periods or dates, or both; in the latter, Time will be connected with Order, and both large; but in the former it will be seen large, and Order small. Many are to be observed, who, upon meeting with persons they have seen before, will, upon saluting one who does not recollect them, say, "I saw you so and so, at such a time and place;" in those persons, a Phrenologist would find Time and Locality large. A remarkable illustration of these two organs acting together

may be seen in the cast of the head of Tilney Matthews, who had the extraordinary faculty of recollecting the persons who visited him, and of stating, with correctness, the time they were with him before. A medical gentleman, who was frequently in the habit of seeing him, stated it as a most extraordinary circumstance, that he would not only tell him the year, month, or day, but the hour of the day of his visiting him, as well as the place, which, upon a reference to his list of visits, he found to his astonishment to be so. A reference to the cast of his head will bear out the circumstance phrenologically.

This organ will be found large in those who are considered good judges, and in fine performers and composers of music, near the organ of which faculty it is closely situated. The late infant Lyra, and Miss Schauroth, the extraordinary pianoforte performer, have this organ and Melody very large.

32. *Melody or Tune.*—The sense of melody and harmony arises from it.

This organ is situated at the lateral part of the forehead, and, when largely developed, it gives a fulness to the part situated between Numeration and Constructiveness. It is one in which those first making observations on Phrenology, and even some who have given the science much consideration, have made mistakes in their observations on persons, *particularly when the persons have Numeration and Constructiveness large.*

Many conceive that it gives the power of performing when manifested very large, but it is not always so, that being accomplishable in combination with other organs when fully developed; but those having it large, without having the power of performing, will be fond of any kind of melodious or harmonious sounds. Hence, its more proper name appears to be Melody.

It is found large in all great composers of music, as Handel, Haydn, Rossini, Weber, and all great musical performers, in

whom it will be combined with Constructiveness, Ideality, Individuality, Order, Time, and other organs, largely developed.

Dr. Gall called it the organ of Music, but Dr. Spurzheim thinks that music is not the result of a single faculty, but of two, the faculties of melody and of time. This difference is often very marked, and some musicians play or sing in an harmonious manner, or put the tunes in conformity one with the other, but do not appreciate the value of time; whilst others observe the cadences, but make faults against the harmony of the tune: the latter will have Time full, and the former small, as compared with tune.

He also states, that it is generally thought that the music of man is the result of his ear; though it must be admitted there is no proportion between the talent of music and the perfection of hearing. Dr. Spurzheim, in treating of the sense of hearing, says, "I have demonstrated that we should never form a judgment by the ear at the commencement of music, nor the mpositions of great musicians when hard or difficult, nor the cular ideas by which some composers are distinguished hers; this must result from absolute knowledge, or in- ent for that sort of manifestation."

s, that he has equally proved that the singing of birds e explained by the ear; as a singing bird, bred and y a bird that does not sing, will still sing according es. Many persons have a fine voice, but little others have no voice, but excellent abilities for ear and voice bear the same relation to music and the hand do to the art of painting: the ear the voice produces it, as the eye sees colours, and ts them in the picture; but the memory, the judg- the invention of tunes and colours, are the attributes or powers. Dr. J. Gregory says, "the faculty itself gift of nature, to be acquired by no kind of study." Conspect.' s. 226.

33. *Language* gives facility in acquiring a knowledge of arbitrary signs to express thoughts, readiness in the use of them, and the power of inventing and recollecting them.

The special function of this organ is to enable us to acquire a knowledge of, and to give us the power of using artificial signs or words. A low degree of the organ, with large Individuality, Eventuality, and Comparison, may enable a person, by great efforts, to learn languages; but a full development is indispensable to fluency in speech or writing. This organ is manifested by the prominence of the eyes: it will be found large in philologists and orators. The prominence of the eye is produced by a large development of this organ, the brain resting upon the upper orbitar plate, and pressing the eye downwards, gives a prominent fulness to it, and indicates the activity of this faculty.

A great number of casts having been taken of persons known to acquire languages readily, and also to have great power in the use of words, it is now evident that this power is indicated in three different ways in the casts; namely, by a very prominent and full eye, by a very large and thick rounding [illegible] also by the length of the diameter of the orbit, and sometimes (though this is but rarely seen) with a combination of the different ways here mentioned.

Dr. Gall, when a boy, had often occasion to regret the difficulty with which he fixed words in his memory. Reflecting on his own case, he naturally observed other boys who learned by heart with great facility, and in them he noticed the eyes prominent, and somewhat depressed from the eyebrow. The cause of this has been already explained.

We are generally wrong in considering the rapidity with which a boy acquires a language, as an earnest of his future abilities: in the race in after life, the best verbal scholar will often be far outstripped by him whom the mere pedagogue has called a dolt and a fool, and lashed for being imagined [illegible]

so. Phrenology shows us the cause of this: a boy who will be admired in the future man, with a defective organ of language, will in the first years of his life never rise under the present generally defective systems of education, even to mediocrity; whilst another, with a good Individuality, Eventuality, and Language and Comparison, is looked upon as a prodigy, and elevated above him, who for sound common sense and judgment is ten years his elder. The present plan of educating all children upon the same system is not more absurd than it is unjust.

The two next faculties, Comparison and Causality, are two of the most important in the whole series; and, when fully developed, and well exercised, with good combinations, form one of Nature's noblest works—man in his most enlightened state.

As there is not a more pleasing sight in history than that of a man of integrity and good understanding, who, in spite of all the changes of fortune, remains the same in every period his life, and in everything he does; so it is nearly equally ing to have our pity excited in many ways, when we see men errors, which, according to the laws of nature, il of bringing on them pains. We frequently meet instances, and cannot refrain from lamenting the of the instruments, upon which human reason, in depends. The man of sound reflection is pene- entiments of compassion when he sees such un- the point of deviating from the path of reason, s they are hardly capable of any longer pursuing.

parison gives the power of discovering analogies, ces, and differences.

faculty is situated on the centre of the forehead, on side of which is Causality. It is the first of the reflecting culties, and when large shows an elevation or fulness on the

middle part of the frontal bone. Dr. Gall states, there are men, who, in their conversations and discussions, have recourse to drawing comparisons and analogous examples, before that of philosophical argument or reasons; in those persons he states he found an elevation in the middle part of the frontal bone.

This faculty compares the actions of other faculties, knowing their difference, similitude, or their identity; it predisposes to the employment of figurative and metaphorical language. Dr. Spurzheim says, "The language of every nation proves whether this organ is much or little developed in the majority of those composing it. If it be generally large, their language is replete with figurative expression:" yet it must be observed that this faculty does not determine the kind of comparison, but that this is dependent upon the peculiar organization the individual possesses: when this faculty, with Form and Colour, is very active, it searches for comparison in form and colour. The organ of Comparison gives a taste for combination, generalization, and abstraction, and is essential to philosophic discernment. Comparison, Individuality, and Language combined, give readiness of apprehension, and fluency of but unless Causality be also large, the reasonings are secutive, and the views are not comprehensive. It large in the heads of popular preachers who illu subjects by similitudes, examples, and parables. I comparisons, it greatly aids Wit.

35. *Causality* traces the dependencies of ph the relation of cause and effect.

Causality is the other reflecting organ: it is sit superior part of the forehead, on each side of Comp near Gaiety. It appears to be one of the most imp all the organs, particularly of the reflective, giving the the power, when assisted by a good combination of the ot

faculties, to look inwardly upon itself, to scan its actions and relations,—

> "To turn thought inward, force back the mind
> To settle on itself, the point supreme of manhood."

An able author, in treating upon the actions of good reasoning power, says, "Reason is the gift of the Supreme Being to mankind; a glorious knowledge of human nature, and one of the chief criteria which so eminently distinguishes man from the brute creation. By reason we mean that peculiar power or faculty of the mind by which we connect, abstract, and compare our ideas or thoughts as occasion offers, for the purposes of right inferences and just conclusions." Happy are they who have a good proportion of this organ, with Eventuality and Comparison! When there is a good combination of the intellectual organs, they will display great practical sagacity; while those having it largely developed, and the other two moderately, particularly Eventuality, have a tendency to speculate largely, and at times commit great errors, for the want of proper attention to facts. *What science, previous to Phrenology, could point out the causes of those differences in different individuals?*

This faculty is a principal ingredient in the great philosophical understanding; it gives deep penetration and a strong perception of consequences in argument. It considers the relations between cause and effect, and always prompts men to ask why. Individuality makes us acquainted with objects; Comparison points out their analogy, or difference; and Causality desires to know the cause of all events: these three faculties when largely developed form systems, draw conclusions, inductions, and point out principles and laws, and thus constitute the true philosophical understanding. No instance has come within the notice of the Phrenologists where this faculty was largely developed, with a good combination,

without its powers in the individual having been great, but when small a difficulty has been felt in drawing correct conclusions, and an incapacity of thinking deeply: when large, it gives the power of what is called metaphysical reasoning or argument. It is the last of the series of organs.

OBSERVATIONS.

THERE are some persons who are always weighing reasons on one side and the other, without ever deciding between them: such persons are mostly sceptical as regards any new science; they will scarcely condescend to allow persons who hold an opinion different to their own to be able to draw proper conclusions, even when facts upon facts are exhibited to their view; even under such circumstances they will say, with an expression of doubt, We must have more proof to convince us of what is stated. The answer of the Phrenologists is, *Search diligently*, and you will find, as we have done; and if the facts will not bear out our assertions, then deal out the tainted arrow or the disbelieving sneer. On facts the fabric of Phrenology has been reared; on facts alone can it stand; by facts, and not by words, we challenge you to prove the science wrong, and its supporters in error; for unless strong facts are produced against it, all opposition must prove futile and weak, and the opposers, without facts to support them, will ultimately find themselves weak in their arguments, if not so in their intellectual mansions. Pope says, the wise man stands between them—

> "With too much wisdom for the stoic's pride,
> With too much knowledge for the sceptic's side."

FREE AGENCY OF MAN.

Many persons, but more particularly those swayed by religious feelings, have, at the first view of the science, thought that the cultivation of Phrenology would interfere with the free agency of man; some, without giving themselves the least trouble to examine its merits, or the facts upon which the supporters of the science rest their claims, and boldly venture to advise a consideration of it. The religious are earnestly requested to reflect whether it is possible a knowledge of the works of God can lead to harm; and those who think it will interfere with the free agency of man, are respectfully invited to consider the following observations:—

The Deity has commanded man during life to pursue a particular course of action. That man is a free agent is a perfect truism, otherwise how can he merit reward or deserve punishment? It might be supposed that if all the actions of man were determinable by an invincible necessity, the right of pursuing those who injure their associates would no longer exist; but Nature unquestionably appears to distinguish man above all other physical beings, by assigning to him the special privilege of an independence of that invincible necessity to which the actions of all other animals are subject.

It is inherent in the nature of man to be anxious for his own well-being; to be desirous to conserve his existence: if all the actions of man arise as a necessary consequence from this primitive impulse—if pain warns him of what he ought to avoid—if pleasure announces to him what he ought to desire—if it is his nature to love that which either communicates delight, or that from which he expects agreeable sensations—to hate that which makes him fear contrary impression, or that which afflicts him with uneasiness, it must appear that he will be attracted by that which he deems advantageous; that

his Will* will be determined by those objects he judges useful; and that he will be repelled by those objects which he believes prejudicial. It is only by the aid of experience that man acquires the faculty of understanding what he ought to love,—of knowing what he ought to fear. Are his organs sound?—his experience will be true. Are they unsound?—it will be false. The sight of an agreeable object, or its idea, creates a desire in him to procure it; but if a new object or a new idea more powerfully attracts him, it will give a new direction to his desires, restrain the effects of the former, and prevent the action by which it was to be procured. This is the mode in which reflection, experience, and reason necessarily arrest, modify, or suspend and determine the actions of man's Will; without this he would of necessity have followed the anterior impulse which carried him towards other desirable objects. In all this he acts according to the laws of nature, and nothing can tend more to the happiness of man than the study of human nature in all its forms, more particularly if that study be directed by the dictates of justice and morality, which those laws so forcibly inculcate.

The principles of Phrenology, far from hindering the cause of virtue, of morality, or of society, will, on impartial examination, show that their object is to restore truth to its proper temple, to build up an altar whose foundations shall be consolidated by morality, reason, and justice; to open a new era, by rendering it a general belief that happiness, the true end of man's existence, can never be attained but by also promoting that of his fellow-creatures.

* "What Metaphysicians term THE WILL seems to be simply *the existing state of the faculties of the mind.*" V. Sydney Smith's Principles of Phrenology, p. 151, edit. 1838. The Will is not an entire or distinct power of mind, but the actual product educed from the working of the metaphysical equation of the then operating and impelling motives. It would be well if metaphysicians, moralists, and theologians had been aware of this fact. What an enormous expenditure of time, labour, scholarship, and pugnacity would the world then have been spared!

Dr. Reid says, philosophers boldly pursue and endeavour to diffuse the cause of gravitation, and other phenomena which are called laws of nature: we know not the limit which has been set to human knowledge; and our knowledge of the works of God can, under such impressions, never be carried too far.

It is impossible to speak dogmatically of the actions of men, although the organs by means of which their minds act are known; because man has free-will, and may perform the same action from many different motives; but, in general, men will act according to the strongest propensities of their nature. (See note, p. 160.)

The system does not lead to the doctrine of necessity, or teach that human actions are the result of natural laws, operating independently of human Will. What right had the metaphysician to sit down in his narrow cell, and take himself as the standard of all mankind? With what shadow of justice could the critic attempt to condemn that which he did not understand? *None of the opponents of the system have ever been even tolerably well versed in it; if they had, their writings would have belied their assertions: a few of them have ventured to say that, so far as their observations went, they found as many of the facts in contradiction to, as in support of, the system; but when pressed by the supporters to specify and show these anomalies, they have hitherto been unable to produce them. The Phrenologist, who for many years has studied the system, and never seen any one fact in contradiction; who is so thoroughly convinced, from innumerable observations, of its truth, and its foundation in nature, that he can as well conceive a man seeing without eyes, as manifesting a peculiar faculty without corresponding develop-

* The article "Phrenology," in the Penny Cyclopædia, is an honourable and solitary exception, and is well deserving of the attentive perusal of every phrenologist.

ment of the organ which bestows that faculty, is at full liberty to say, (and cannot be blamed for his conclusion,) that such pretended anomalies are either mistakes arising from ignorance and want of accuracy in observing, or they are the offspring of some improper motive.

ANALYSIS OF HUMAN ACTIONS.

If one could suppose a society of men so situated in this habitable world that their various feelings, passions, and sentiments could be easily gratified, either by the possession of what was pleasurable or the removal of what was painful, there would be reason to conclude that human life would be uniformly serene, peaceful, and free from many passions arising from the impediments which are placed in the way of gratifying our natural wants.

The law of this world, however, is, that man must procure his food by the sweat of his brow. By Divine Law obstacles have been placed between him and the objects of his most natural desires, in order to urge him to the employment of those faculties on the activity of which our future happiness most probably depends. Many of these obstacles arise out of the natural construction of the globe itself; many others are owing to the artificial constitution of the society in which we live; but by far the greater portion arise from our ignorance and disobedience of the natural laws—*the laws of God;* many also arise from the erroneous views entertained by governors and legislators in framing the laws for the government of communities; and hence many new and powerful feelings which agitate the human frame occur, producing confusion of ideas, and frequently insanity.

From what is here stated, it will appear that mental and moral improvement is the foundation of civilized society.

This must be obvious to every one capable of sound judg-

ment; for if the human race were actuated merely by sensual appetites, and felt the influence of no power superior to that which instinct gives them, the business of legislation would be restricted within a small compass, and the arrangement of its affairs would require no extraordinary skill. If mankind entered the world simply to gratify the first calls of nature, or were endowed with capacities sufficient only to perform those actions which are requisite to supply their corporeal wants, promote the increase of their species, and render their existence subordinate to some higher race of beings, the laws of government would be few in number, and the vicissitudes of society would never appear complex, but the administration of its affairs would be uniform and easy. In such a case, it would be absurd for the multitude to claim any share in the constitution of their own laws, or to assume the prerogative of electing their own governors. Non-resistance and passive submission to the despotism of those individuals who chanced to possess a superior degree of muscular strength or instinctive sagacity would doubtless appear to harmonize with the whole circumstances of a destiny so unenviable and degrading.

But there is obviously a principle in man whose qualities surpass the corporeal system, and from whose energies the commotions which agitate the world arise. The faculties sensation, which man possesses in common with the lower animals, are simply the first elements of his constitution. He is likewise inspired with sympathetic affections and with desires after enjoyment, which the objects of sensation can never thoroughly gratify. His imagination rises on the wing of inquiry, and surveys the universe. Contemplation excites curiosity, and forms in his mind innumerable associated ideas; he learns to discriminate between good and evil, and treasure up in himself a fund of knowledge; he partakes of the delights of wisdom and virtue, ascertains the superiority of reason over

mere uncultivated instinct, and is solicitous to advance in his attainments towards perfection. *In what, then, consists the true dignity of human nature, but in the duly exercised and highly cultivated state of* all *his faculties?*

To obtain wisdom—to improve in virtue—to be useful to his kind—and to be happy in himself, are, doubtless, the most legitimate and dignified pursuits of man; but when the mind is neglected and debased, his worth then is insignificant, and his condition much to be deplored. *Every institution, therefore, which is designed for the permanent government of man, ought to be founded on the essential principles of his nature, and rendered subservient to the progressive improvement of his mind.* Those are the wisest of human laws, therefore, which ensure the freedom of mind, and lead to the proper cultivation of all his faculties; but whatever regulations impede its progress, confine its knowledge within narrow bounds, or remove the means of cultivation beyond our reach, are allied to the interests of tyranny, and often produce insanity, and therefore should be classed amongst the curses of human life. A visit to our lunatic asylums will prove that man owes his elevated position in the scale of being, in a great degree, to the possession of sound reason, and that it is only by its due cultivation he can arrive at the true end of his existence, or obtain the honour and happiness which the Divine Munificence designed him to enjoy.

INSANITY.

The attention of the public having been drawn within the last few years to the subject of insanity, in consequence of the investigations that have taken place into the regulations of the various hospitals and private establishments for the reception of lunatics, induces us to offer a few remarks, with a view o-

still drawing some further and more marked attention to the treatment of those labouring under that ever-to-be-lamented disease which we consider best defined as *the diseased manifestations of the mind.*

Inquiries into the deranged manifestations of the mind must become interesting to every class of society: for in its attacks distinction is out of the question; all classes are subject to it—the titled, the rich, the middle, and the humblest, become its victims. It ought, therefore, particularly to engage the attention of physicians and medical men. It has been considered as almost endemical in Great Britain, but that we consider as an erroneous opinion; for in our visits to Paris, we found an immense number of insane patients in the hospitals of the Salpetrière, the Bicêtre, Charenton, Rouen, and other places, to the extent of some thousands, clearly demonstrating that other countries are not free from its attacks.

Every one who has observed the deplorable condition of insane people—who has witnessed some of the disorders which take place at times in their *feelings* and *intellectual manifestations*—who, for instance, has seen that some individuals feel the most distressing anxiety, and fancy themselves objects of human persecution, while others consider themselves victims of Divine vengeance—who has remarked, that often all the best principles of the human mind are perverted, and a pious Christian changed into a drunkard and an abandoned felon—that others, naturally of mild and pacific dispositions, appear during their attacks to be inspired by the demon of mischief—that some of known probity feel a blind propensity to steal—that others feel a ferocious inclination to commit to the flames everything of a combustible nature, feeling as if acting by Divine command; others to imbrue their hands inhuman blood, even that of their wives and offspring, others in that of their offspring only;—that modest females are seized with the feelings of libertinism—that wretched persons think them-

selves bishops, popes, lords, ministers, kings, and emperors—in short, every one who has observed insane people must have perceived that they not only often lose their moral and intellectual character, and in consequence their personal liberty, but also frequently their bodily health, to such an extent, that sometimes the mere human figure or skeleton of their species is all that remains of them: such persons must surely most earnestly wish for some amelioration of their condition, humanity demanding from us, as a point of duty, to contribute and explain every means within our power which can tend to diminish the occurrence of, as well as to alleviate the malady, and, if possible, to restore the afflicted to a proper condition of mind and to *a healthy state of brain.*

The causes of our ignorance of insanity heretofore have been very numerous, which, to a certain extent, are removed by Phrenology; the examination of the subject having been deemed extremely difficult, and its cure having been often considered as beyond the power of the medical profession: it has consequently been confined to a certain class, who have endeavoured to cast a veil over their mode of practice, and attempted to shroud it in a cloud of mystery: hence the reason why so little has been done to teach medical pupils that very little which has been known. The notions of insanity which any one acquired depended upon his own application, and more frequently upon accidental circumstances. At the universities, the medical students have been obliged to attend lectures on the diseases of animals and on the veterinary art—but who has heard of lectures being regularly delivered upon the diseases of the human mind at the universities? Although so important, it seems to have been totally neglected. Lately, that is, within the last thirty years, in the investigation of the manifestations of the mind, a little more attention has been given to the influence of the organization, which has undergone examination with somewhat more care, whereby the brain and

nerves have acquired a degree of importance which they did not possess in the estimation of less recent physiologists. For can it for a moment be doubted, that a perfect knowledge of the faculties of the mind, and of the conditions under which they are manifested, must lead to a better knowledge of their deranged functions?

Here a fine field is open to the physiologist and anatomist, by Phrenology proving to demonstration the establishment of 36 distinct organs of the mind, each being capable of disease, singly or in combination, the same as any nerve, muscle, or limb, without materially affecting the whole or its direct neighbouring organ, many instances of which are known. Dr. Spurzheim, in his work on Insanity, feeling the importance of a knowledge of the diseased and healthy functions of the mind, says, "Thus we flatter ourselves that our anatomical and physiological investigations will become the basis of *a new doctrine of insanity.*" Every one must agree with Haslam, in his observations on madness, "that whenever the functions of the brain shall be fully understood, and the use of its different parts ascertained, we may then be enabled to judge how far disease attacking any of those parts may increase, diminish, or otherwise alter its functions."

Here we find a gentleman who has been the better part of a long life professionally devoting his time to insanity, telling us that when the functions of the brain shall be fully understood and the use of the different parts ascertained, great improvement in the treatment of insanity must take place. Who will now dispute whether the brain is a single organ, or rather whether it be not a complication of organs, each organ giving rise to a peculiar manifestation differing in function from that of every other, and consequently thereby establishing the actual existence of such complication of organs? The individual who should now declare the brain to be a single organ would indeed be a bold man; before he ventures to do that,

we would advise him to consult his own professional reputation, and do as we have done, collect facts, reason upon them, and not upon mere idle theory. Moreover we would advise medical gentlemen in particular to visit the pauper lunatic asylum for Glasgow or for the county of Middlesex,* and see what has been done in classification, by the aid of Phrenology; there they will find pauper lunatics occupied in every kind of useful employment in the domestic business of the establishment, even to the cookery; carpenters at work with edge-tools; bricklayers with their labourers; others managing and taking care of the stock of a farmyard; others in the cultivation of nearly seventy acres of land—the whole by pauper lunatics, and *with much fewer servants than any establishment, having the same number of inmates, can boast of. How is it done? Is it by the old method of managing pauper lunatic asylums? Is it by any method that is laid down in the unphrenological works published upon the subject of insanity?* No, we say boldly, it is not; but by a judicious system of classification which the late Dr. and Mrs. Ellis may almost exclusively claim as their own, aided by the science of Phrenology, which enabled them immediately to classify and instantly discover into whose hands they could entrust edge-tools, or any kind of instrument by which they were likely to injure themselves or endanger others, as well as to arrange them in the wards, at meals, in their sleeping-rooms, and even during their amusements.

* This allusion to the pauper lunatic asylum for the county of Middlesex refers to the period when Hanwell was under the superintendence of the *late* Sir William and the *present* highly gifted Lady Ellis of Southall. We having had no opportunity of judging as to the management of that institution since the secession of the late Sir W. Ellis, are incapable of stating anything either in praise or dispraise of it at the present moment; but, under the worthy knight's superintendence, economy and a most admirable system of classification prevailed, so that even the labour of the lunatics was decidedly productive. Such it is rumoured is the case in the Glasgow asylum.

From what has been stated, it must be evident that Phrenology is applicable to and highly useful in the treatment of the insane, by indicating a much more ready mode of exciting them to or in procuring amusement for them, and by giving them occupation, choosing that occupation for them, and selecting the individuals so to be occupied.

To show how correct has been the view taken by the late Dr. and Mrs. Ellis, we shall give some extracts, written by that gentleman in 1815, during the time a parliamentary inquiry was going on respecting madhouses, in consequence of some inattention and abuse having been discovered in the care of and in the treatment of insane persons. The late Dr. Ellis acknowledges in his pamphlet that, up to that period, his experience was but little, therefore what he has effected proves that his view of the subject has been correct, and his inferences to have been more practical than he himself could have imagined possible, at least, within such a limited period of time.

The late Dr. Ellis, in his pamphlet, after some preliminary remarks to the committee or gentlemen to whom it is addressed, says, "Foreseeing how difficult it will be to lay down a plan that will not infringe upon the liberty of the subject, and yet keep under restraint all those whose situation requires it, that will be best calculated to expedite recovery, and yet afford the safest and most comfortable asylum for those whose reason cannot be restored, is a matter of the greatest importance to every party concerned, namely, the public, the medical man, and the insane.

"Insanity, we consider, may be divided into three states. The first, where, from various causes, a single wrong impression is so strongly fixed on the mind as to prevent the reasoning powers from perceiving the fallacy of it, and producing at the same time a constant desire in the patient to convince others of its correctness, and leading to such impropriety of

conduct as is injurious to himself and others; this state assumes a variety of shades, as *the habit of body and the passions of the mind of each different patient vary.* In the next state the ideas are unconnected, but not destroyed; the impressions are perfect in the mind, but the power of associating them is lost: in this state, also, *considerable variations take place in different patients and at different periods.* At one time they can arrange a few ideas with some judgment, and at another sink almost into idiotism. The third and truly melancholy state is that in which the mind seems to lose all power of action, and the patient exists almost insensible to the impressions of surrounding objects. The raving and melancholy, I think ought not to be considered as distinct and separate states from the others, but the consequence only of the patients not having their wishes gratified, or their being controlled, operating differently on different dispositions and on bodily health.

"From what has been said respecting the nature of the disease, it will be evident that to overcome false impressions which have taken place in the first state, and the capability that exists of connecting the ideas together in the second, can be accomplished only in the first case, by directing the train of thoughts to other subjects, and in the second, by presenting to the patients such objects as will assist them in connecting together a few ideas at a time, as a child is taught to read, by adding one syllable to another; for these purposes *nothing is found so efficacious as occupation and employment; but that a great variety is necessary must be obvious.*" Hence the importance of large asylums or establishments for the treatment of insanity; for in a great number of persons some are sure to be found who can contribute to the amusement and pleasure of others, which would be rarely the case in small societies; and, therefore, the importance of a large proprietary establishment for the rich as well as the poor must be seen to

be of the first consequence in conducing to tranquillity, and thereby ensuring their restoration.

Here a fine field is opened by Phrenology, which gives the power of seeing at once what will be agreeable and what disagreeable to them as an occupation; it being by this means that the late Dr. and Mrs. Ellis were, immediately patients entered the asylum, enabled to class them, and find them occupation and amusements, and that without waiting weeks, nay months, as under the old system, to find out the prevailing propensity, or the peculiar talents, disposition, and temper; for an insane person having large Cautiousness or Secretiveness, or both; Causality, Firmness, and Self-esteem large, or two or three of them very large, with Hope small, it would take the most attentive and diligent person, unacquainted with Phrenology, weeks or months to discover the talents, temper, and dispositions of such a person; but by the science the whole may be written down as soon as they enter the asylum, and that with a certainty of being able to act upon it; therefore, in the first and second stages of the disease, means may be taken to overcome the false impressions which they may be labouring under, by at once proceeding to direct them to such objects as will assist them to properly connect their ideas, and divert their attention from the false notions which they have previously entertained.

From what is now ascertained, it appears that useful occupation is of the greatest importance in effecting the restoration of insane persons, and in the better management of them.

Certainly, that is the case: for occupation, properly apportioned, produces natural fatigue, which superinduces natural rest, which keeps the mind from wandering over the past, and gives a zest to the present; consequently, tranquillizes the faculties of the mind, communicates a stimulus to the digestive organs, invigorates the bodily actions, and thus leads to a much earlier state of convalescence, and in many cases, to a more

certain and permanent restoration to their proper state of mind, to their occupation, to their families, and to society in general.*

EDUCATION OF CHILDREN.

In drawing conclusions on character, care should be taken in giving the age some consideration, as the same powers cannot be predicated of those under eight years of age as may be of those of greater maturity.

At the age when children begin to unfold their ideas, and express their thoughts in words, they are such interesting and entertaining companions, that they attract a large portion of our daily attention: we listen eagerly to their simple observations—we enter into their young astonishments at every new object—we are delighted to watch their emotions—we help them with words to express their ideas—we anxiously endeavour to understand their imperfect reasonings, and are pleased to find or put them in the right. This season of universal smiles and courtesy is delightful to them while it lasts, but *it soon passes away;* they soon speak without exciting any astonishment, and instead of meeting with admiration for every attempt to express an idea, they are often repulsed for troublesome volubility; even when they talk sense, they are suffered to talk unheard, or else they are checked for unbecoming presumption.

* The efficacy of Sir Wm. Ellis's plan of getting his patients to work, is fully illustrated, in the number occupied, at the time of his leaving and giving up the management of Hanwell Lunatic Asylum to Dr. Millingen. I was that day at the Asylum. Sir Wm. had the return made up to 12 o'clock. There were at that time 592 inmates in the asylum; out of whom, 480 were in actual occupation, and 3 only under restraint, if it could be so called. At the particular request of Sir Wm., I went over every part of the asylum to examine the gas fittings, lights, apparatus, &c., when he also requested me to observe the state of the patients who were occupied, and of those not in occupation, which I did, and was perfectly satisfied that, as to the number in occupation, his return was correct.

Children feel this change in opinion most severely; they are not sensible of any change in themselves, except, perhaps, they are conscious of having improved in sense and language. This unmerited loss of the late sympathy usually operates unfavourably upon their tempers; they become shy, silent, and reserved, if not sullen; they withdraw from our society, and endeavour to console themselves with other pleasures, and feel discontented with their occupations and amusements, for want of those which used to be at their command. Children of a timid temper, or of indolent dispositions, are quite dispirited and bereft of energy in these circumstances: others, with greater vivacity and more exertion, endeavour to supply the loss by the invention of independent occupations; but they feel angry when they are not rewarded with similar praise for their "virtuous toils." They naturally seek new companions amongst other children, or complaisant servants. Immediately the education is at a comparative stand, for neither the servants nor their new playfellows are capable of adequately becoming their instructors; *nor can tutors hope to succeed who have transferred their power over the pleasures, and consequently over the affections of their pupils.* Sympathy now becomes the declared enemy of all the authorities. What chance is there of obedience or of happiness under such a government?

Would it not be more prudent to prevent than to complain of these evils? *Sympathy is our first, best friend, in education; and by judicious management, might long continue our faithful ally.* See notes at Pref. p. 142, and at p. 92.

Instead of lavishing our smiles and attentions upon young children for a short period, just at that age when they are amusing playthings, should we not act more wisely if some portion of our kindness were reserved a few years longer? By a proper economy, our sympathy may last for years, and contribute to the most useful purposes. Instead of accustoming youth early to such a degree of our attention as cannot be sup-

ported long on our parts, we should rather suffer them to feel a little ennui at that age, when they can have but few useful occupations. We should employ ourselves in our usual manner, and converse, without allowing them to interrupt us with frivolous prattle; but when they ask sensible questions, make just observations, or show a disposition to acquire knowledge, we should assist and encourage them with praise and affection. Gradually as they become capable of taking part in conversation, they should be admitted into society, and they will learn of themselves, or we may teach them, that *useful and agreeable qualities are those by which they alone must secure the pleasures of sympathy.* Esteem being associated with sympathy, will increase its value; and this connexion should be made as soon, and kept as sacred in the mind, as possible.

By a study of the science, what a power will be given to preceptors and parents, who, by phrenological observations of the manifestations of the cerebral parts, will be able to judge of the different feelings and sentiments of those under their care! They will be able to judge of those who will be pleased by the smiles bestowed upon them, and of others who seek approbation by different means—they will be able to judge of those who, when they meet with any opposition or check to their pleasures or pursuits, become silent, reserved, sullen, or discontented; and of others who take everything suggested to them as proper, without making any complaint of its propriety or otherwise, but cheerfully submit to whatever is suggested to them by their parents or preceptors. When this is duly considered and appreciated, what benefits may be anticipated for early youth! We will not venture to predict, but certain we are, that to reflecting minds the importance of the science in the education of youth, up to and after this period, will be found of more real benefit than any observations we can offer, or so small a publication as the present can give any idea of.

From 3 to 8 years of age, much determinate or per-

manent character cannot be predicated, except in very extraordinary cases, where Individuality, Eventuality, Form, and Locality are very large; under this age, the child so developed will be very anxious in inquiry, and by repeated questions manifest a strong desire to know the uses and purposes of everything that falls within its notice. If Self-esteem and Combativeness be also large, and Cautiousness moderate, they will show much of what is called forwardness and boldness of manner, repeating and pressing their questions till some answer is given to them; while, on the other hand, children having those faculties small will sit for hours without any symptom or indication of having taken notice of any of the objects before them. But in the observations made on children about that age, many will be observed to have fine foreheads, particularly in the upper part, who, to the surprise of their parents and preceptors, appear to be dull in their learning; while, on the other hand, others, who appear not to have their foreheads so well developed, take the first part of their education with apparent facility. Those classes of children peculiarly demand the attention of parents and preceptors, and it may be fairly presumed that much may be done by a study of the science in this stage of childhood. The former, though apparently not so, are taking in store of what is passing before them, but which does not show itself till the perceptive faculties are more developed. Those above mentioned will have Cautiousness, Comparison, and Causality large, and Individuality, Eventuality, and Locality but moderately developed; while those having the latter with Language large, Cautiousness, Comparison, and Causality moderate, will take the first principles of their education readily, and appear their superiors in learning, but who nevertheless, to the astonishment of their preceptors, are quite at a stand when they are put to the higher branches of education, while the former become their superiors in turn, and keep the lead. *What an acquisition to parents and preceptors must it*

be to have the means of discovering and correcting the errors of youth so developed! A little study, on phrenological principles, of the dispositions and manifestations of the cerebral parts of youth will do this; for, if known to be similarly developed as above, they may, by proper means, be kept from excitement, and it may be fairly presumed those parts will not increase in the same ratio as if kept constantly active.

From the age of 8 to 16, nearly the whole of the faculties come into action, when much permanent and determinate character may be predicated. During this period, Attachment, or the want of it, is strongly manifested; much of the disposition under the influence of Combativeness and Destructiveness may be observed; also reserve, cunning, self-consequence, or the desire of pleasing by the manifestations or otherwise of Secretiveness, Cautiousness, Self-esteem, and Approbativeness, influenced as they may be by the activity of the sentiments, or the *relative proportion* of the feelings and propensities. During this period, Constructiveness, Form, Ideality, Imitation, and the perceptive faculties, take an active turn, according as they may be influenced by Conscientiousness, Benevolence, and other faculties.

Strong feelings of proper respect for the Deity and their fellow-men make their first impressions about this period. We are disposed to think that a careful study of the science, combined with education, will point out the means of treating youth in a very different manner from what has been heretofore the practice; for it is a fact known, if the dispositions of youth can be early discovered, they may be treated and put forward much more readily in their studies; at the same time it should be noticed, that hitherto it has taken much time to become acquainted with the dispositions of some, whilst those of others are readily observed. The cause of this difficulty Phrenology points out. Show two individuals to an able phrenologist, the one whose disposition is apparently difficult,

the other easily to be discovered—he will soon distinguish each of them, and give the why and the wherefore of the difference.

Youth thus circumstanced are often unkindly treated, to their injury, and moved from seminary to seminary without any appearance of improvement; but who, nevertheless, and that at no late period, astonish their parents and preceptors by the rapid progress they are supposed to have made exclusively in the latter part of their education. Under feelings of this kind the early tutors of youth are often blamed, and that at times to their injury, even though their zeal and anxiety have been redoubled to bring them on, without any probable chance of success, and without any means of knowing or even conjecturing the specific cause of their failure. But this, we presume, now that the science is making great and decided progress, will shortly not be the case; for the study and knowledge of the principles of Phrenology will give both parents and preceptors the means of readily forming a tolerably accurate judgment of the dispositions of children; and being known, how differently they will be treated, and thereby put forward, cannot for a moment be doubted.

Having 140 casts, which have been taken of individuals at different periods, and a very large increase having taken place while they were engaged in systematic study, the increase being much greater at those parts of the head where the organs called into action by their particular studies are located, confirm the opinion advanced some years ago,* that a successful

* An eminent physician in 1821 stated, that he imagined direction might with great advantage be given to various faculties at the same time, stating that he thought by pursuing the studies they took cognizance of for two or three years, those parts of the brain where those faculties are organically situate would be found to have increased in more than their ordinary relative volume. His opinion is singularly borne out; for, if the works of Dr. Spurzheim are consulted, the very organs brought into action to produce the knowledge obtained will be found to have greatly enlarged, while those not brought into action remain nearly the same as they were 21 and 21 months before in the heads here alluded to; and in some cases, where a propensity has ceased, the head has got less. Many changes have also taken place at late periods of life, where new habits have been formed, and new

advance in education, or in particular studies, by intense application, would occasion an alteration in the form of the head, and that an increase would take place in those parts excited by the particular studies, which observation is now proved to be correct; but what science before was able to refer to the causes, or even to hint at what caused remarkable differences in different individuals? These circumstances, in our opinion, get rid, in part, of the idea entertained by many, of man being merely and solely the creature of circumstances. Looking at the facts before us, man must be admitted to be, at least to some extent, a free agent; and if so, the horror of fatalism is but as a phantom.

From the circumstances mentioned above, much, we consider, by judicious management of youth, may be done for them, in which the study of phrenology will assist; for a preceptor, who wishes to gain ascendancy over a youth who manifests by his development good reflective powers and sentiments, and who has a large Cautiousness, must reason with all possible precision, and must always show that he himself is willing to be convinced by the strongest arguments which can be produced; and a preceptor who has a knowledge of the science will immediately discover those faculties, and in lieu of coercive means, which are too often resorted to in seminaries, he will commence by reasoning. It is a fact pretty well known, that if youth can be brought to hear and give reasons for their opinions, they will not be violent and positive in their assertions; they will not think the truth of any assertion can be manifested by repeating over the same words a thousand times; they will not ask how many people are of this or that

studies have been successfully pursued. Amongst them, changes have taken place between 32 and 36, 41 and 46, 45 and 70, and 50 and 80 years of age: indeed, changes have taken place at all periods between 8 and 80 years of age, having upwards of 140 casts in illustration of this fact. This doctrine of changes of Form was not unknown to Lavater; and the believers in physiognomy will be perhaps surprised to learn that Lavater himself contends that physiognomy must be based upon craniology.

opinion, but rather what arguments are produced on each side: in fact there is very little danger that any, whether young or old, would continue to be positive, who were in the habit of exercising their reasoning faculties. The same rule may be observed when a weakness is supposed to exist, and also where youth are largely developed in the moral sentiments with a moderate proportion of the animal.

From the age of 16 to 30 and upwards, the most active period of the life of man, particularly of the studious, the whole of the faculties come into action and full play. In many individuals they are in a very active state, and then much determinate character may be predicated; but some allowance ought to be made for those who have been in an unhealthy state, under which circumstances the faculties would be in a state of morbid excitement or comparative inactivity. There are also individuals who, during this period, from circumstances, have not been placed in the way of having an opportunity of cultivating their faculties; numbers who have shown peculiar talents late in life are of this description, and of which persons there are many examples in the polite and mechanical arts, from whom, if casts had been taken previously to their talents being actively employed, and then taken again when they had been two or three years so engaged, many interesting discoveries might have resulted.

Between the age of 30 and 60, particularly during the last 10 years, much of the determined character of man begins to fail him (except under extraordinary circumstances, when it may extend many years longer); he becomes more easily irritated, and manifests a wish for tranquillity; but it is also remarkable in the history of man as the period of deep reflection in those having the powers,—the time when Conscientiousness, Cautiousness, and the superior sentiments, when fully developed, show themselves most powerfully active, by circumspection, love of justice, and firmness;—and it also is

during this period that the dignified, the philosophical, the statesmanlike, the artistical, and settled character of man is more exhibited to view than at any other period of his history; after this period his memory, together with many other powers, and even his settled character begins to fail also.

By the observations here made, it will be perceived that *something of the age is requisite to be known* when any induction is about to be made from casts of heads or skulls, also whether educated or not, healthy or unhealthy, and also if male or female: when this is done, those making the observations will be able to arrive at their conclusions much better, and with more satisfaction to the parties wishing information; for reason will convince any one that there must be a difference in point of power, as well as in the character of an educated and uneducated individual, also in the character of male and female, and in the sickly and healthy. *The opponents of the science always overlook these conditions, and Phrenologists, lest they might be considered impertinently curious, do not sufficiently, indeed very rarely, insist upon them.*

In the preceding observations we have taken a slight view of the periods at which we consider some advantages may be obtained in the education of youth by a study of Phrenology, as well as in giving a better direction to their faculties when entering on their studies for any particular profession, trade, or business.

Being impressed some years ago with feelings of this description, our inquiries were directed, amongst others somewhat arduous, to the application of the science in aid of education. In some of our researches we certainly have been gratified beyond our expectation; we therefore now beg to invite preceptors and parents to *do as we have done*, and to make some inquiry into the disposition and abilities of youth, by means of

the cerebral organization, before the mode of education, the profession or business they wish to prepare them for, is finally determined upon; for we have not the least hesitation in declaring our opinion, that if parents and preceptors will pay attention to the cerebral organization of youth, the former will have the gratification of knowing, by their acquaintance with organology, that their offspring are progressively advancing in knowledge, as fast as nature will admit; and the preceptor will feel the same gratification from its being ascertained, by the same means of examination, that he has not been inattentive to those under his charge.

As before observed, feeling it will give great facility in the education of youth, we beg to recommend inquiry into the subject, and have not the least fear that, if commenced, it will be readily followed up, for its importance will be felt and appreciated by all whose avocations will admit of their entering upon the investigation.

To give some facility in the inquiry, we have given three wood-cuts from known cases of peculiarity in education and organization.

The cast from which the above wood-cut is taken is that of a youth who experienced difficulty in receiving the first prin-

ciples of education, appearing to his parents and preceptors sometimes dull, and at other times the reverse. They often discovered that he was possessed of knowledge superior to what they wanted him at the time to learn: finding this, they naturally concluded his dulness proceeded from obstinacy, and took their measures accordingly, endeavouring to remove the difficulty by punishment, but soon found that was not the way to proceed, for, having Combativeness, Destructiveness, Self-esteem, and Firmness large, his passions were roused to a high degree: moreover, having the superior faculties large, he was capable of perceiving, though not of proving, that his knowledge was superior to many who met with caresses for performances inferior to his own. *This would have a tendency to keep his passions alive.*

We here find the perceptive organs small, with Individuality moderate, while the superior are very large, namely, Comparison, Causality, Ideality, Imitation, and Benevolence.

Youth, thus developed, will be found slow in receiving the first principles of education, and often suffer punishment, the perceptive faculties not being in proportion to the superior. It is from this class of youth that many prodigies turn out, and jump over others who have been considered their superiors in the early part of education. *Let a practical phrenologist see cases of this kind, and he will have no difficulty in pointing them out.* We have met with a great number, many having been brought for the purpose, and seldom if ever failed. This being the case, it is fair to presume that something may be done by a change in the mode of education, and by assisting them in the acquisition of first principles, *for it is in this they want assistance.*

Parents and preceptors have many times inquired if we could point out a proper mode to adopt in such cases. With much deference to the preceptor, we feel that it lies with him to do that—it is his province; but we beg to assure him, that

unless he avails himself, as we have done, of the advantages derivable from a practical acquaintance with Phrenology, he will find it extremely difficult, if not impossible, to devise a plan of education peculiarly applicable to such cases. The numerous failures on record, even after a long personal intimacy, fully demonstrate the truth of this position. Much valuable information upon this subject may be, however, derived from Dr. Spurzheim's, Dr. Caldwell's, Dr. Brigham's, and Mr. Simpson's works on Education, as well as from Dr. A. Combe's physiological works. The works of Wilderspin, Pestalozzi, &c., will well repay the labour spent in their perusal.

We are inclined to think that manifestations of derangement of mind, in many cases, proceed from this class of youth, as we find upon research, that the organization of the anterior part of the head is very like that of a great many cases of derangement which have come under our notice. If a study of the science will assist, in part only, to prevent such a catastrophe, what an acquisition it will prove to many in society! for every one of common feeling must lament seeing so many comparatively deficient in intellectual power. We seriously invite those having the means of inquiry into the particulars of this class of youth, to enter upon it, and to note down such particulars as come within their view, as we feel, by so doing, they will confer more benefit than at a first glance they may imagine; neither will the difficulties in the inquiry be so numerous as may at first appear.

The subjoined figure is different to the former: this is taken from a youth who readily acquired his first principles, but experienced great difficulty in the more advanced part of his education.

We here find quite a different organization; in this the perceptive organs are large, and the reflecting, with Ideality, moderately developed. This is different to the former, it being

in the next or second part of education that the difficulties were discovered. Many of this class of youth will be found between the ages of seven and fifteen, during the time they are educating or preparing for their respective businesses or professions.

In this figure the whole of the perceptive organs, with Language and Individuality, are large. Children and youth thus organized will easily learn the first principles of education, and, having Language large, will be able to explain themselves without difficulty; but it should be observed, the superior faculties are moderately developed, viz., Comparison, Causality, and Ideality. Hence the organs that acquire superior knowledge being moderate, a difficulty in attaining it is the natural result. Our inquiry proves it to be so, though we have not seen quite so many instances confirmatory of it as of the first case; but we have not the least doubt they are quite as numerous, and that further time and much extensive research will lead to the discovery of them.

Parents and preceptors do not discover this in youth till the

former are beginning to think of placing them out in some business or profession; then they begin to examine and look into their state of education, when they often find, to their mortification, that little, if any, progress has been made during the last two or three years; and having been prevented from making the inquiry from a feeling that by attention they would continue as at first, they now find, to their astonishment, their mistake. The preceptor is then applied to, and often much blame is undeservedly attached to him, which he in return may successfully throw on the youth, though neither are in fault; punishment then commences, by deprivations of pleasures or comforts, and even sometimes corporal chastisement, and that too often by direction of the parents; but what is the result? why, the youth having arrived at an age which enables him to think a little for himself, feels he is hardly dealt by, and endeavours to get himself removed to other seminaries, and if he fails in this will run away, being at an age to be able to resist or evade punishment to a certain degree. At this age, youth (particularly if Self-esteem be large) think much of themselves, and often fancy they can live without the assistance of their parents, and imagine they know what is best for their own interest.

Great numbers of this class may be found; and we have no doubt that cases of this kind, as well as of those who experience difficulties in the acquisition of first principles, may be pointed out, in very early youth, at the first commencement of education.

Another great advantage, and not of less importance in education, is *that of thoroughly understanding their dispositions.* If a preceptor of youth is favourably spoken of (and it is known that one brings forward his pupils much quicker than another), you will find he has some method of readily learning the dispositions of his scholars, either by physiognomy or some other means peculiar to himself. This done, it is a fact well known,

that youth can be brought forward much better in their education. Being lately in company with an eminent preceptor, who justly has the character of being able to easily find out the dispositions of youth, we inquired if he could lay down any plan for others to do so; he felt that this was impossible, stating at the same time, that in some youths it was impossible to discover their disposition; watch them as carefully as you will, they will baffle every endeavour. He has known instances of this kind when the dispositions have not been detected even after five years spent in anxious observation.

This, in a great number of instances, will be found to be the case when due inquiry is made. Is it not fair to presume much may be done for youth if preceptors can be enabled to discover, previously to the commencement of education, those who will be slow in acquiring first principles, and those who will experience a difficulty in the higher grades of education, as well as the peculiar disposition of each of them? The truth of this may be easily ascertained. The one who feels a difficulty in acquiring the first principles may be readily pointed out, and nearly equally so may those be who meet with difficulty in the second part of education: only let a good practical phrenologist examine these youths, with whom preceptors have been for years without discovering their dispositions, and he will readily point them out, as well as explain the probable causes of the preceptor's inability to do so. If this really be the fact (and where is the experienced manipulator who can doubt it?), what an advantage to preceptors and to youth! Let those who doubt it make the trial, put Phrenology fairly to the test, with *honesty* and *candour;* and then if it proves, in duly qualified and recognised hands, *frequently* fallacious, treat the professors of it as vain pretenders, for they will no longer be worthy of respect. The Phrenologists challenge inquiry, solicit tests, and fear not the result.

Can the metaphysicians of the obsolescent school undergo

any such practical tests? Can they in any way, either in the treatment of the insane,—in the classification of criminals,—in the discrimination of character,—or in the education of youth, turn their various and discordant theories to any practical account? If they cannot, then, in this age of utility, of practical philosophy, and experimental inquiry, all their speculations, which are unsupported by facts, must bow to the new philosophy of man, which is based upon—which is the *physiology of the brain.*

The next figure is that of a youth who has taken the first and every branch of education with facility.

It is quite different to the other two. The intellectual faculties are all largely developed, as well as Language. Youths thus organized rarely experience any difficulty; they will readily apply themselves to any art, science, or profession.

HAVING alluded to the punishment of youth, a few observations here will not be out of place. We have long entertained an opinion that corporal punishment is not the proper way to

correct or check the passions or propensities of youth; we are also of opinion that to correct, punish, or in any way disgrace a youth *in the presence of others*, in the school, or otherwise, when his companions are present, is equally bad; but should experience prove we are wrong, we hope these observations will be considered as a mere error of judgment, and not as thrown out with the view of imputing blame to any one who may think differently.

An able writer on the education of youth says, "To punish in the presence of others drives the gentle spirit to artifice, and the rugged to despair; generates deceit and cunning, the most hopeless and hateful in the whole catalogue of youthful failings. Severity will drive terrified children to seek, not for reformation, but for impunity. A readiness to forgive them promotes frankness. And we should, above all things, encourage them to be frank, in order to come at their faults. They have not more faults for being open, they only discover more." A study of Phrenology will enable a preceptor soon to discover the deceitful, the cunning, the timid, or the frank, in his pupils.

It often happens where youth make great progress in their learning, or manifesting at times extraordinary talent, they are in general paraded into notice; nay, it almost becomes a custom among teachers, "which is not the more right for being common:" they are apt to bestow an undue proportion of pains on children of the best capacity, as if only those who manifest great talents were worthy of attention.

They should reflect that in apparently moderate talents, carefully cultivated, we may and ought at times to expect much, but at later periods; for it is indisputable, that apparently moderate abilities, carefully cultivated, often enable their possessor to outstrip those who are considered more brilliant, but less persevering. The race is not always to the swift, nor the battle to the strong.

The former, manifesting extraordinary talents, and being

prematurely paraded into notice, often become like the inhabitants of a luxuriant southern clime, where nature has done almost everything, and indolently lay hold of this very fertility as a plea for doing nothing themselves; so that the soil which teems with such abundance, leaves the possessor idle; while, on the other hand, those of more moderate abilities, and with little or no prospect but what results from the exercise of their talents and perseverance, will be more like the native of a less genial region, supplying by his labours the deficiencies of his lot, and thus overtaking his more favoured competitor; and by a substitution of industry for opulence, he improves the riches of his native land beyond that which is blessed with the warmer sun, and thus vindicates Providence from the charge of partial distribution.

The observations made in this part relative to education are much longer than we intended; but feeling the subject to be an important one, we have enlarged upon it in a practical point of view, in the hope that more competent persons will take a hint from what is here thrown out. We can assure them, after 22 years' experience, that although they may meet with difficulties, they will receive much gratification, and any suggestion we are able to give will be communicated with the greatest alacrity.

APPENDIX.

HINTS FOR THE PRACTICAL APPLICATION OF PHRENOLOGY, TOGETHER WITH A FEW CASES DEMONSTRATIVE OF ITS POSITIVE UTILITY.

Grouping of the Organs.

To those who wish to take a philosophic view of the science, as a study or an inquiry, we beg their attention to the situation of the various organs, which we consider must strike every one, as it does us, with the great beauty of the arrangement and order in which the organs are proved to exist in the brain; viz. we find the whole propensities in the posterior part of the head and base, or lower part of the brain; above these, in the coronal region, we find the moral sentiments and feelings, which control or govern the propensities according to the relative proportions and size of the organs in each head; and, in the frontal region or forehead, we find the intellectual faculties most beautifully arranged. Hence, in looking for actions arising from the propensities, you must observe the posterior basilar region; if arising from the sentiments, the coronal region; and in looking for talents or the power possessed by an individual, you examine the forehead or frontal region: moreover, in examining the minutiæ or detail of the various faculties, with their peculiar situations, we are struck with the fine arrangement, which the following remarks, it is hoped, will fully develop.

In looking to the frontal region, on the superciliary ridge, we find the perceptive faculties, viz. No. 22. Individuality, the faculty of perceiving minutiæ, distinct existences; No. 23. Form, the faculty of perceiving configuration; No. 24. Size,

the faculty of perceiving dimensions, bulk, magnitude; No. 25. Weight, the faculty of perceiving momentum, impetus, force; No. 26. Colour, the faculty of perceiving its harmony and its varieties; No. 28. Number, the faculty of perceiving quantities and multitude; No. 29. Order, the faculty of perceiving physical arrangements—these require the use of the eyes to bring them into operation, and we find them around the orbits, without which they could not be brought into action.

Immediately above them, in the middle of the forehead, we find several organs, viz. No. 30. Eventuality, the faculty of perceiving phenomena and events; No. 27. Locality, the faculty of perceiving places and their relations; No. 31. Time, the faculty of perceiving duration, rhythm; No. 32. Melody or Tune, the faculty of appreciating music, sweetness of sound, harmony. These partake of a higher quality, and are situated immediately above the others in the forehead.

Above them, in the upper superior part of the forehead, we find the Reflective Faculties, viz. No. 34. Comparison, the faculty of perceiving how things differ or agree, and of comparing by analogy, &c.; No. 35. Causality, the faculty of perceiving causation. These are much higher in their quality, and are situated in the upper part of the forehead; that is, as they ascend in quality, so they are found ascending in local elevation.

On the side of the head, we find a group of organs which appertain to invention and mechanical genius, viz. No. 9. Constructiveness, the propensity to construct, to invent; No. 19 Ideality, the sentiment of the ideal and the beautiful; with No. 32. Tune, the perception of harmony, and No. 29. Order, or the perception of arrangement, *so highly requisite to bring them effectively into use;* and adjoining to them, No. 8. Acquisitiveness, the propensity to acquire and to seek reward.

On the side of the head also, posterior to the last, we find another group of equal importance, viz. No. 5. Combativeness, the propensity to contend, to combat, and defend; No. 6. Destructiveness, the propensity to destroy, to engage; No. 7, Secretiveness, the propensity to conceal; and immediately above them, No. 12. Cautiousness, the sentiment of circum-

spection and hesitation, together with No. 16. Conscientiousness, the sentiment of justice and veracity—principle—so highly necessary to restrain the actions of Combativeness, Destructiveness, Secretiveness, and Acquisitiveness, above which they are located.

Farther back, in the lower posterior region of the brain, we find another group frequently acting together, viz. No. 1. Amativeness, the propensity to physical love and propagation of the species; immediately above it, No. 2. Philoprogenitiveness, the propensity for the protection of the young; above which is found No. 3. Inhabitiveness, or the propensity to reside in or attachment to place; and on each side of Nos. 2 and 3 we find No. 4. Adhesiveness, the propensity for attachment and friendship; adjoining also is No. 5, the propensity to combat, to contend with or against difficulties. It is the combined action of this group which leads to marriage; and, when in combination with a good development of the moral sentiments, leads to true social happiness; but, if in combination with moderate or small sentiments, it leads to disorder and confusion.

Higher up in the posterior part of the brain, we find No. 10. Self-Esteem, the sentiment or feeling of self-importance and pride; on each side of it, No. 11. Approbativeness, the sentiment or desire of approbation, distinction, and notoriety; close to the latter No. 12. Cautiousness, the sentiment of circumspection; adjoining also we find No. 15. the sentiment or feeling of firmness, steadiness, and resolution; on each side of the latter we find No. 16. Conscientiousness, the sentiment of justice, veracity, principle. This group of organs when largely developed, with the rest of the sentiments, produces a fine, noble character; but if Self-Esteem, Love of Approbation, and Firmness are very large, and the sentiments moderate, then we must act cautiously with such a being.

Anterior to the above group, on the coronal region, we find the most important group, perhaps, of the whole, viz. No. 13. Benevolence, the sentiment of goodness, amiability, and charity; next to it is No. 14. Veneration, the sentiment of adoration,

reverence; on each side of which is, No. 17. Hope, the sentiment of confidence and bright anticipation in respect of the future; near to which is No. 18. Wonder, or the sentiment of the marvellous, supernatural, new, and extraordinary. When this group is found fully developed with Firmness, Conscientiousness, Comparison, and Causality large, it forms one of Nature's noblest creatures, who must be an ornament to society. Happy must the family be, or the institution, when a being with this group in combination with a few others largely developed presides over them!

We have deemed it expedient, before adverting to Manipulation, to offer the previous sketch of the grouping of the organs to the consideration of the phrenological student, in the hope of attracting his attention, as well as of giving him some insight into "the higher latitudes of the science." We shall now proceed to lay down certain principles, by an intimate acquaintance with which, the science will admit of being almost universally applied in the exposition and appreciation of human character, in all its abundant and almost inexhaustible variety.

ON MANIPULATION.

Manipulation being a subject which is but very imperfectly understood, except by a very limited number of persons, who may be considered phrenological authorities, notwithstanding the number of pretenders who are daily obtruding themselves upon the public, we have deemed it advisable to insert, in this place, a few extracts from "The Phrenological Conversations," which we published in 1833, in which the main points to be attended to in the practical application of the science are explained; and this we are emboldened to do, from having been assured by some excellent practical phrenologists, that they have and *still do derive great advantage from the hints therein advanced*, especially as it is the only work we are aware of, (which was our motive for publishing it,) in which the subject is treated *almost exclusively in a practical manner*.

That work is the effect of 14 years of practical experience,—the result of our reflections upon the practical application of the science in upwards of 16,000 instances. We do not claim for our opinions the privilege of infallibility; but we do venture, with some degree of confidence, to prefer a claim to an extensive experience in manipulation, hardly surpassed, rarely equalled by any living phrenologist, so far, at least, as human phrenology is concerned: nevertheless, we love the science too well, and we are too thoroughly aware of the difficulties which beset the manipulator, to imagine nothing is further to be discovered, or that more definite and precise rules may not hereafter be laid down for facilitating the practical application of the science. Unfortunately, however, too many who are utterly incapable of practically applying it, consider themselves competent to criticise and condemn even that which they do not understand, though they cannot substitute anything themselves of the least practical utility, whether as the result either of their experience or reflection.

EXTRACTS FROM "THE PHRENOLOGICAL CONVERSATIONS."

Q. Can you lay down any rules, or point out the modes of proceeding, to obtain a knowledge of the science so as to apply it usefully in the direction of others in education and insanity?

A. We can lay down some rules, that is, point out the mode we have ourselves adopted in studying the science; but one thing must be taken into consideration, namely, that *every organization is not endowed with faculties sufficiently developed to become highly proficient in the science;* and, therefore, like chemistry, surgery, medicine, and other sciences, it will have many admirers, students, and inquirers, but few philosophers, or *those who can make correct practical observations, or give practical demonstrations of the science, so as to apply it usefully.*

Q. What steps would you recommend in the commencement to study the science, so as successfully to apply it to education, insanity, and the development of character?

A. The first point is to get the names of the organs, with their situations and different functions, well fixed in the memory; to understand well the three large divisions—propensities, sentiments, and intellectual faculties—so that when speaking on a point of character, to know whether it is from the animal propensities, moral sentiments, or intellectual powers, that it is manifested.

To observe the portions of brain in the coronal region, the anterior region, the posterior region, and the basilar region, they having severally and conjointly great influence on the character.

To examine and see how far the individual is influenced by particular motives, and *what restrains their actions.*

To attend carefully to the smaller divisions, but *more particularly those organs that give facility in methodising, arranging, and combining the ideas*, thereby augmenting the efficiency of the whole.

To attend particularly to the state and development of the organs on *the medial line or centre of the forehead.*

To observe the influence of the temperaments, to inquire the state of the health, whether the head has been injured, and the age.

To those who wish to go deeply into the science, the combinations must be studiously attended to—and the anatomy of the brain, and the philosophy of the science, diligently studied.*

Great facilities may be obtained, and practical observations made, by placing the heads of youths, adults, casts of their heads, or skulls of known character, in contrast by juxtaposition—in prisons, schools, and in social life, which will thereby lead to the formation of correct practical conclusions on development.

Q. To acquire a knowledge of the science, you recommend, first, getting the names, numbers, situations, and functions of

* Dr. Gall's work on "The Functions of the Brain;" Dr. Spurzheim's "Anatomy of the Brain," and Mr. G. Combe's last edition of his "System of Phrenology," are invaluable for these purposes.

the organs well fixed in the memory; what would you advise as the best mode of doing that?

A. To write the names of the organs and their functions on a card with the number attached to each, carrying it about you for reference, until they are well fixed in the memory; having done that, look at persons well known for particular talent, and a want of it; getting them to allow you to make the observation, and to inform you if it be right or not; visit schools, and get the masters to show you youths who have facility in acquiring particular things, such as tasks of words, languages, arithmetic, classics, drawing, &c. &c., also others that have difficulty in acquiring them; to examine youths who are known for courage, others that are timid, lively, stupid, witty or otherwise; with a variety of other qualifications, which, if attended to, will give great facilities. To assist the inquiry, a mapped phrenological bust, with a good manual or elementary work, as a key to the science, will be requisite. This work contains diagrams which are useful. Also, in making observations, do not speak of or predicate actions, but speak of endowments or instincts, such as love of home, children, music, &c.; that he or she should be cautious, just, benevolent, firm, or the reverse, as these proceed from single organs, and will not be found difficult; but if you say that person should be an artist, a musician, a mathematician, a theologian, logician, &c. &c., then great care and practical experience are requisite, as these may be termed characters, and arise from a *combination of several organs*, therefore more difficult to discover, and should be spoken of very cautiously.*

* Sir George Mackenzie, in his excellent Illustrations of Phrenology, (p. 25,) observes, "a tolerably well developed head should measure, from the nape of the neck to the root of the nose, 15 inches; between the orifices of the ears, over the crown, 15½ inches; and in the greatest horizontal dimensions, nearly 2 feet. It is true *generally*, that a large brain denotes greater capacity than a small one; but intellect and motives of action depend, for their energetic manifestations, upon the size, *proportion*, and state of activity of particular parts. It cannot be too often impressed on the student of Phrenology, that it is impossible to know, by external signs

Q. Why is it requisite to understand well the three large divisions?

A. Because, when speaking of character, or the capabilities arising from the development of the organization, it becomes highly necessary to see at once whether the individual is liable to excitement from the propensities or sentiments, and therefore to act under their influence, or whether it arises from the intellectual faculties, which may be governed *in their direction* by the sentiments or propensities.

Q. Can it be shown by Phrenology what persons are liable to act under the influence of the propensities, sentiments, and intellectual faculties?

A. Certainly. Those who commit offences against the laws of their country, and thereby become criminals, act under the influence of the propensities; such as thieves, forgers, and murderers. Those whose actions in life partake of the high moral character act under the influence of the sentiments, such as theologians, moralists, and every kind of benevolent and amiable character. Those who show peculiar or extraordinary talents act principally under the influence of the intellectual faculties, such as naturalists, mathematicians, mechanicians, artists, &c.; but their actions may be influenced by the propensities or sentiments, according to their relative development.

Q. You say to those who wish to go deep into the science, some of the combinations must be attended to; what are we to infer from that?

alone, the character of an individual. We can only ascertain *what dispositions he possesses most strongly*. By long observation of his actions and conversation, we may discover whether he has subdued the lower propensities and given due exercise to the higher faculties. We may, after a little practice, observe the kind, and also the degree of talent possessed by an individual; but it is impossible to ascertain *by simple inspection*, whether he has or has not misapplied his talents, or even whether his feelings and propensities be active or otherwise. By observing *proportions*, we may, however, judge to what conduct he is *naturally* prone; but *we cannot pretend to predict actions*." Manipulation should always be preferred to simple inspection.

A. Persons who commence an inquiry into the science make great mistakes at times, by predicating actions from their observations, in lieu of predicating instinct or pleasure in a particular object,—the actions arising from a combination of two, three, or more of the organs, while the instinct or pleasure in an object arises from a single organ.

Q. How are new inquirers to distinguish one from the other, without some examples to guide them in the inquiry?

A. New inquirers, we would advise, at the commencement of their studies, to speak of instincts or pleasures only, until they are well acquainted with the functions of all the organs, and have a good idea of the effect of the combinations, as a few examples will demonstrate.

Example 1.—If you see the organ of Melody relatively very large, you may say with safety its possessor should be fond of music; that arises from the single organ: but if you say that a person should be a good musician or a composer, then your judgment should extend to the combinations, for a musician should have the organs of Melody, Time, Number, Weight, Individuality, Constructiveness, and Imitation, fully developed, most of them large, or he will make a poor musician; and to become a composer, Ideality and the rest of the intellectual faculties should be fully developed. For instance, a musician must understand tone, periods, numbers, force of touch, minutiæ of notes, continuity, and resemblance, which capacity arises from the development, and according to the state or relative size of the organs of Melody, Time, Number, Weight, Individuality, Constructiveness, and Imitation.

Example 2.—If you see the organ of Constructiveness relatively large, you may say that person has manual dexterity; but if you say he ought to be a mechanic, then you speak of combinations, for a mechanic should be able to distinguish dimensions, shape, minutiæ, parallel lines, resemblances, and construction, which capacity arises from a good development of Number, Form, Individuality, Size, Imitation, and Constructiveness. The excellence of what he executes will be according to the relative fulness of Ideality, and the rest of the intellectual

faculties, in combination with two, three, or more of the others, Constructiveness forming the base of the inventive genius.

Example 3.—When speaking of actions arising from the moral sentiments, the same rules must be observed, *i. e.* when speaking of religious persons, if you say A will have a high respect for the Deity, but that B should become a devotee, and would adopt religious occupations from choice, they will be found to differ: A will have the organs of Veneration and Hope relatively fully developed; but in B, who shows real devotion, Veneration, Hope, and Marvellousness will be found relatively very large; Veneration, looking with reverend regard; Hope, confidence in future events; and Marvellousness, looking to the supernatural, as something above the powers of mere human being.

Example 4.—In speaking of the actions of propensities, by the same rule, upon seeing a person with Acquisitiveness relatively very large, it might be said, he will be covetous or a thief; but if Conscientiousness and Benevolence are relatively large with Acquisitiveness, it will give the disposition to acquire justly, and distribute for proper uses; but if Conscientiousness be small and Acquisitiveness relatively large, he will not scruple to appropriate to his own use the property of others.

We therefore recommend those who are studying the science not to speak of actions either too soon or too confidently, especially as great and varied experience is requisite to successfully apply it in the indication and exposition of character.

Another circumstance should never be lost sight of, that *Phrenologists*, when looking over organization, *can never say what a person has done, or predicate what he will do; they are only able to say what he is capable of doing at the time they examine his organization.* But if a person possessing the means of pursuing a particular profession, for which he is intended, be manipulated by an experienced practical phrenologist, the latter will be able to predicate whether it will take him a long time or not to acquire a competent knowledge of it.

CASES DEMONSTRATING THE UTILITY OF PHRENOLOGY.

USE OF PHRENOLOGY IN CLASSIFYING AND APPRECIATING CONVICTS.

A remarkable case of the application of the science in elucidating the character of 148 convicts, on board the ship England, bound to New South Wales, in the summer of 1826.

I WAS invited by Dr. Thompson (to whom I was introduced by Mr. Wardrop, the celebrated surgeon), the medical gentleman under whose charge they were placed, both as prisoners and patients, during their voyage of transportation to Sydney, to examine them as a matter of curiosity.

Upon arriving on board, the ship then lying off Woolwich Dockyard, Dr. Thompson informed me that he had got an account of their character and behaviour during confinement, both before and after their trials, for the offences they had committed, from the gaolors or governors of the prisons from whence they had come, to guide and assist him in the management of them in their passage out to the colony.

The doctor then informed me that, from looking over those accounts, he was sorry to say there were many amongst them who appeared to be callous to their situation, with some who were stated as being desperate and incorrigible; but there were some amongst them who appeared alive to their situation, and had behaved with great propriety from their first confinement to that time,—inquiring if the science would enable me to point them out, namely, to distinguish the former from the latter, and if we would do that,—to which I assented, and proceeded to the undertaking, during which time Dr. Thompson himself was arranging them into two divisions from the papers and accounts sent to him.

My first step, on proceeding to make my examination, was to observe the general state of their temperaments, *a point I was particularly requested by Drs. Gall and Spurzheim never to overlook in making a development of character.* I found amongst those who appeared callous to their situation, the Lymphatic temperament prevailed, with a moderate portion of the Sanguine. The features below the cranium were large, giving, at first sight, the appearance of large heads; but the heads, estimated from the orifice of the ear, were below what I should consider an average size. The intellectual region small, with a few of the knowing faculties full, the reflective very small, and moderate coronal regions; rather large Benevolence in most, and large in some; small Conscientiousness, Veneration, and Marvellousness prevailing amongst them generally. In the whole of this class the basilar region of the brain was very large in proportion to the other regions of the same heads. The organ of Amativeness was in general full and large; Combativeness and Destructiveness full and large; Secretiveness, Acquisitiveness, Self-esteem, and Firmness large and very large; small and moderate Cautiousness; and small Conscientiousness was prevalent throughout this portion of them.

Of those considered incorrigible and desperate, we found the temperaments to be Lymphatic and Sanguine, nearly equally so; the brains somewhat larger; faces not so full as the former; the intellectual regions rather larger in proportion to the other regions of the brain, with, in general, large and very large Combativeness, Destructiveness, Secretiveness, Acquisitiveness, Self-esteem, and Firmness; small and moderate Cautiousness, and very small Conscientiousness, Veneration, and Marvellousness; small coronal regions, and very large basilar regions of the brain, with Amativeness, in general, large and very large. The number in these two divisions, according to the view we took, was 104 out of 148.

In the remaining 44 we found the temperaments to consist of the Lymphatic and Sanguine, nearly equal, with a very small portion of the bilious. The intellectual regions rather

larger in proportion, and rather better coronal regions than the above, but with large basilar regions. In this class, Combativeness, Destructiveness, Self-esteem, and Firmness were only full and rather large; Secretiveness and Acquisitiveness large; moderate Cautiousness, and small Conscientiousness; and in this division Benevolence was much larger than in the former.

The man Hughes, who will be hereafter spoken of, was an exception to the whole.

The convicts were ordered on deck in sections, and finding they had no numbers attached to them, I proceeded to their examination, which occupied about three hours, taking down their names, and placing a private mark against each to distinguish one class from the other, during which time Dr. Thompson was doing the same from the accounts he had received from the prisons.

Upon handing to him the names of those I considered to be desperate and incorrigible, also those who had behaved with propriety, and upon comparing these with the accounts selected by himself, *we differed in two cases only*, which seemed equally to astonish him, the owner of the ship, and a clergyman, who were on board at the time.

Being much struck with what had taken place, Dr. Thompson stated that he was about dividing them into messes of ten each, and over each mess he wished to appoint one to act as a petty officer, and to communicate with him; requesting as a favour that I would select those for him, whom I considered would best suit his purpose. I then re-examined those who had acted with propriety, and handed to him the names of 13 individuals whom I considered would best answer his purpose; at this he was astounded, for *he had already appointed them*, and showed me and those present his books in confirmation of his statement; but at the same time stating he was somewhat surprised at the omission of one man's name, who he represented was one of the cleverest amongst the whole, and had behaved with great propriety during his confinement, and after trial, though, certainly, previously a desperate character. I

mmediately exclaimed, "The man you mean is Hughes: assuredly, as you say, he is a clever fellow; but, undoubtedly, the most desperate scoundrel you have in the whole crew, and he will give you some trouble before you get to Sydney; should you have bad weather, or by any means have to deprive them of their comforts, or should you have to suffer inconvenience, so as to occasion any dissatisfaction amongst them, then Hughes will be their leader, and excite them to disobedience or mutiny." I advised the doctor to cautiously prevent Hughes getting pen, pencil, or paper, and to preclude him from communicating with either of the sections to which he did not belong (the convicts being divided into three sections), or with the seamen or mariners; yet, with all this precaution, he did afterwards nearly succeed in exciting the rest to mutiny, for which he was tried at Sydney.

Dr. Thompson, having received so good an account of this man from the prison, requested that I would examine him (Hughes) more minutely, which I did, by having him brought into the cabin, when I found that the animal portion of the brain was very large, with Secretiveness, Acquisitiveness, Constructiveness, Destructiveness, and Combativeness very large, together with large Cautiousness, while the whole of the coronal region was small, with small Benevolence, and very small Conscientiousness. Finding, upon minute examination, such an organization, I was still more earnest in my advice to the doctor to cautiously watch Hughes. The advice was subsequently followed; the result of following it, and the utility of the science in the classifying and managing of convicts, will be irrefutably manifest from the annexed letter sent to James Wardrop, Esq., the eminent surgeon before referred to,—a letter which fully justifies the application made, unfortunately in vain, by Sir G. S. Mackenzie, Bart., to Lord Glenelg, late Secretary for the Colonies, in February, 1836, to avail himself, in his official capacity, of a phrenological "officer qualified to investigate the history of convicts, and to select them on phrenological principles.' Surely this will eventually be done—must be done!

In France the government have already recognised Phrenology as a science, and availed themselves of M. Dumoutier, by appointing him Phrenologist to the exploratory expedition, commanded by Chevalier Captain D'Urville, to the Southern Pole.

Can no Phrenologist be found in the United Kingdom whose services our Government might avail themselves of in the classification and management of criminals, in the education of the rising generation, and in the superintendence and medical treatment of the insane? Are the principles of the science even now unknown and unheeded by our legislators? Unheeded they may be, unknown they hardly can be. As many distinguished members of both Houses of Parliament have, for some time past, (and the like is the case in the United States,) had their attention markedly directed to the science of human nature, the physiology of the brain,—Phrenology. It is to be hoped, therefore, in these particulars at least, through their instrumentality, the United Kingdom will be prevented from neglecting the noble exclamation of Milton, "*Let not England forget her precedence of teaching nations how to live!*"

*Letter from Dr. Thompson to James Wardrop, Esq.**

"Sydney, Oct. 9, 1826.

"I HAVE to thank you for your introduction to De Ville and Phrenology, which I am now convinced has a foundation in truth, and beg you will be kind enough to call on Dr. Burnett, who I have requested to show you my journal, at the end of which is Mr. De Ville's Report, and my report of conduct during the voyage; and likewise to the depositions against some of the convicts, whom you, with your usual *tactus eruditus*, discovered would give me some trouble during the voyage, and I think the perusal of them will make you laugh, as they were going to rip up the poor doctor like a pig. De Ville is right in every case except one, Thomas Jones; but this man can neither read nor write, and being a sailor, he was induced to join the conspiracy to rise and seize the ship, and carry her

* (V. Phren. Journal, vol. iv., p. 470.)

to South America, being informed by Hughes, the ringleader, that he would then get his liberty. Observe how De Ville has hit the real character of Hughes, and I will be grateful to De Ville all my life; for his report enabled me to shut up in close custody the malcontents, and arrive here not a head minus, which, without the report, it is more than probable I would have been. All the authorities here have become Phrenologists, and I cannot get my journals out of their offices until they have perused and re-perused De Ville's report, and will not be in time, I am afraid, to send them by the *Fairfield*."*

USE OF PHRENOLOGY IN DETECTING THE PECULIAR FORMS AND VARIETIES OF INSANITY.

A remarkable case of derangement of the organs of Amativeness, Philoprogenitiveness, and Adhesiveness, with strong excitement, approaching to derangement of Marvellousness, Veneration, and Hope, which occurred at Brighton, in November, 1832.

Upon my arrival at Brighton I was informed that a poor shoemaker, who had been subject to paroxysms of monomania, occasioning him to be placed under restraint for short periods during four or five years, was then labouring under strong excitement of monomania, quite different from his former attacks of insanity,—that he had some very extravagant notions; and I was asked if I would take his case as a test, and indicate what I considered to be the points upon which he was deranged.

Being a case of five years' standing, though only for short

* "We cannot conclude without bestowing a well-deserved encomium on Mr. De Ville, for so cheerfully undertaking and so skilfully performing a task from which all but a zealous Phrenologist would have shrunk with a mingled feeling of disgust and fear."—*Phrenological Journal*, vol. iv., p. 471.

intervals, and hearing that between each paroxysm of insanity, or period of restraint, he had been at large with his wife and family, I at first hesitated to take it as a test, fearing that an increased thickness of some parts of the skull, or structural derangement of the brain, might have taken place, and thus present a difficulty; but, after a little reflection, I requested permission to see the man and feel his head, when I would say whether I would take it as a test or not, as *I consider there is a difficulty even in forming a correct opinion of cases of Monomania, or Insanity, when they are of more than eighteen months' or two years' standing.*

We then proceeded to the workhouse, where the man, at this time, was. There were present Mr. Long, a surgeon, whose case it was; Mr. Lane, a surgeon; Mr. Thorsby of North Street, and Mr. Masquirier of Brighton. I drew their attention to the basilar region of the brain, when it was evident that Amativeness, Philoprogenitiveness, and Adhesiveness were under strong excitement, they being considered to be eight or ten degrees warmer than the upper part of the posterior region of the brain.

I then directed their attention to Veneration, Hope, and Marvellousness, which were also considered to be under very strong excitement, which opinion was pronounced to be correct by all present.

Turning to Mr. Long, whose case it was, I entreated him to be certain, before he manumitted his patient, that all excitement had ceased in these two regions, particularly in the lower basilar region, or he might attempt the life of his wife and children, under the impression that God had authorized or commanded him to do so. The matron, who was present, with uplifted hands, and eyes transfixed with surprise, said, that within the previous half-hour he had been to her, stating that God had commanded that she should let him out to destroy his wife and children. Upon inquiring why he wished to perpetrate such an act, his answer was, God had commanded him to do it.

I then stated, from the excitement which was going on in

the coronal region, that he would entertain some extravagant notions, that God would authorise or command him to do some extraordinarily marvellous or wonderful act. To which the matron replied, he was continually saying God had authorised him to build a bridge across the sea, for the comfort of persons going from Brighton to Dieppe. Here were evidently diseased actions going on in those regions of the brain, and consequently diseased manifestations of those organs and their combinations.

The rest of the organization appeared to all present to be of the same temperature as his body.

The brain, altogether, was a little below the average size, and moderate in intellectual power, with the coronal region sufficient to control the animal propensities, when not under excitement.

PRACTICAL APPLICATION OF THE SCIENCE IN APPRECIATING INDIVIDUAL CHARACTER.

In March, 1839, a gentleman, one of the managers of a large establishment in the neighbourhood of Charing Cross, applied to me, introducing a youth 14 years of age, stating that Mr. S * * * *, in whose service the mother had been for 14 years, and whose conduct had been exemplary, was anxious to do something for the boy, and requested my opinion as to the best mode of doing it, but particularly directing my attention to his moral conduct, and as to how far his honesty might be relied on.

Upon examination I found a fair intellect, with the propensities and sentiments nearly balanced, with large Self-Esteem, Love of Approbation, and Benevolence—rather large Acquisitiveness and Secretiveness—full Cautiousness—moderate base of the brain, Combativeness, and Destructiveness. I said, "Now here is a case which a little attention will lead into the right path, and a little neglect and intercourse with low society will lead wrong;" begged he might not be placed in the way of temptation, or it might lead him to pilfer, to gratify some feel-

ings of pride, of which he might find examples amongst the young men in their employ, they being upwards of 100, but that I did not think it would be for evil or vicious purposes.

Now, it turned out, that they had detected him in robbing them to the amount of about £3; and when asked what he had done with it, although he could not get out until after nine at night, being placed at the cash desk to take petty cash in small amounts—which, by the by, should not have been done for two or three years to come—it was discovered that he had bought pannuscorium boots, paid a hair-dresser a quarter or half a-year in advance, and purchased some other things amounting to about £2; and, upon being pressed as to what he had done with the remainder, he said he had given most, or all of it, to a man that swept the crossing opposite the house; when asked what he gave him at a time, he replied, a penny, sometimes twopence, and several times sixpence. Mr. B. inquired why he did that, as neither Mr. T., or P., nor himself ever gave more than a halfpenny. His answer was, because the man was so kind and civil, moved his hat to him, and always inquired how he was.

Now here I consider the boy was improperly placed, as I told Mr. B. The examination should have been first made; and I beg to remind those having young persons under their care, that from 12 to 16 years of age is a peculiarly important and eventful period in the lives of youth, being the time when Self-Esteem and Love of Approbation begin to feel a new desire of importance, and with it a new desire of wants and personal gratifications. It is at this period that the benefit of moral example or the contagion of bad example mainly arises; and from the numerous examples of youths, who have been brought to me by their parents, at those periods, to know what was to be done—fathers, in a commanding tone, holding out rewards or threats, and mothers, with their tears, in order to effect a reconciliation between the parent and son and the son and parent; and the scenes I have witnessed at times are enough to overpower the firmness and confound the better feelings of man.

A case similar in organization and age was brought to me by my worthy friend Mr. Foulkes, previous to employment being given, but my advice was not acted upon, and he was robbed, so far as was traceable, to the extent of £60. Here a number of young men were employed, and the contagious influence of pride and temptation was ever operating upon the boy, and he fell. He had bought a gold watch and appendages, diamond finger-ring, &c., with the produce of his embezzlement.

NOTICES.

The students and admirers of Phrenology are respectfully informed that J. De Ville has a very large collection of masks, heads, and skulls, containing examples of peculiar organization, as well as of a great variety of developments, amongst which are casts of many interesting public characters, and of national crania, showing the diversity of national character, which are on sale at 367, Strand.

Ladies or gentlemen, desirous of having casts taken of their own or other persons' heads, for phrenological purposes, or for family memorials, are respectfully informed, that by a new, simple, and easy process, occupying not more than five minutes, they can be accommodated with perfect fac-similes, at a very small expense.

A great many persons, upon viewing J. De Ville's extensive collection, have expressed much regret that no casts have been taken of many distinguished persons, who are now no more, either while living or after death, such as Mungo Park, Howard, Captain Cook, Raleigh, Drake, &c. &c.; also of persons distinguished in the senate, at the bar, and on the judicial bench; and of those eminent in the drama, the fine arts, music and other sciences, as well as of authors, &c. &c. Had such casts been taken, the means would have existed of placing in public or private collections, busts, or casts, of eminent persons, the loss

of which is now much regretted. For it is a fact too well known, that the characters of the most eminent public and private individuals are rarely if ever justly estimated till after their decease.

As a proof of the facility with which this mode of casting is effected, it may be stated that J. De Ville has taken upwards of one thousand four hundred casts from living persons, amongst which are those of about 70 ladies, and of many youths between 9 and 15 years of age; and how desirable is it to have casts taken, from which at any time busts or portraits may be completed!

Ladies and gentlemen being acquainted with distinguished and eminent persons are solicited to use their influence with them to have their casts taken,* by which they will confer a benefit on their country, (and much greater on the science of Phrenology,) it being a fact known, and by almost all persons acknowledged, that a greater stimulus cannot be exhibited to the rising generation than the images of those who are held up to them as the most perfect models for their imitation; for it may be then said to them,—Go, do thou likewise, and your model will be placed amongst those eminent men who have deserved well of their country and their kind.

Many persons have a disinclination to allow a cast to be taken; some from the circumstance of having been cast by persons of very limited experience, which had occasioned them not a little inconvenience. That cannot now be the case, casting from nature being so much better understood; especially as, by J. De Ville's process, not the most trifling inconvenience is experienced.

In making observations on character, and in minuting down the relative size of the organs, we use the initials of the words only; and as many persons may not be aware of this,

* J. De Ville will feel obliged to any one having any national crania, well-authenticated casts or busts of eminent persons, or singular characters, for permission to mould them, and will be most happy to present the possessors of them with casts in exchange.

as well as of *our* scale, we have subjoined a short explanatory description.

The initials made use of are, S, R S, M, F, R L, L, and V L; the three first are seldom made use of, very few, particularly educated persons, having the organs so small; but when found so, they must be taken into consideration, producing inactivity in those organs, and, to a certain extent, some restraint on the action of others. They stand for small, rather small, and moderate. The next, F, for full, which indicates a little activity, but in so small a degree, that it should be taken but little into account. The next, R L, rather large, denotes a higher degree of activity, and when found, produces much more action, particularly in combination with the two next degrees of activity, and must be taken notice of in the induction of character. The next, L, large, indicates a considerable element in the character, and must be taken notice of in the deduction, as it marks some prominent point. The next, V L, for very large, denotes strong points of character; but in making observations, those which produce restraint on others must be taken into consideration before the deductions are drawn. Sometimes it happens, but the cases are rare, that an organ will be larger than V L denotes—we then distinguish it by V V L. There will also be observed a small star on one side of the initials; the side that this is on denotes that the organ is larger on that side of the head than the other.

We also use seven numbers to indicate these degrees of size, viz.—

1. Small.
2. Rather small.
3. Moderate.
4. Full.
5. Rather large.
6. Large.
7. Very large.

AN ACCOUNT

OF

J. DE VILLE'S PHRENOLOGICAL COLLECTION.

1841.

MANY persons may ask, what is the use of so large a collection of casts as we possess? amounting to upwards of 2,400: viz., nearly 1,500 taken from persons while living; about 150 from criminals, English and foreign; 120 pathological cases elucidatory of insanity, &c.; about the same number of masks of distinguished persons; and nearly 500 moulds, casts, and real crania of different nations. Our answer is,—To prove the truth of the science. Moreover, when our attention was first drawn to Phrenology, many of the organs were marked as conjectural; it therefore was desirable to collect facts to prove or disprove the existence of those organs. Upon reading the works of Drs. Gall and Spurzheim, and finding them, particularly the former, not satisfied with a few specimens, and conceiving their views to be correct, we followed the example, and collected largely, to ascertain the existence of the organs considered conjectural, as well as to clear up some doubts, which then existed, as to their functions. Out of the 1,500 casts we possess of living persons, *upwards of* 500 *were collected for this special purpose.*

Another point we were desirous of accomplishing, namely, to obtain casts to illustrate every organ, very large and very small, from persons living and well known: this required 70 casts, which we have taken for this purpose.

Another object we had in view, considering the science

applicable to education, was to obtain casts of youth where difficulties occurred in educating them for particular occupations, notwithstanding whatever might be the wish of the parent or preceptor. Also to collect casts where facility was found in the acquirement of knowledge, with little or no instruction from the parent or preceptor, and often contrary to both their wishes on particular subjects. The casts taken for this purpose are at least 70, many of them singular cases.

We have also taken about 50 casts of pious persons, devoted to religion, the majority of them having abandoned their occupations or professions for theological pursuits. Amongst them are several very remarkable cases.

We have also about 40 casts of distinguished artists, painters, sculptors, architects, many of them of decided celebrity.

Of navigators and travellers we have about 30 casts.

Of poets, authors, and literary characters, we have upwards of 80 casts, amongst them many distinguished individuals, and peasants, and others.

Of musicians, composers, and amateurs of music and singing, we have upwards of 70 casts.

Of pugilists we have about 25, amongst them several who were called the champions of their time.

A few years after being engaged in the formation of the collection, we discovered a change of form of the head to have taken place in a young man, who had for several years neglected his studies: upon his coming into society, in the 24th year of his age, and finding he had not fitted himself to move amongst educated persons, he again attended college, studied medicine successfully, and upon taking a second cast of his head, two years after, we found a change of form had taken place, corresponding with his successful studies, giving him increased power to pursue them, which he now does as a physician in this metropolis. Music, we understood, was originally selected for him as his profession.

This threw a new light on the subject, and feeling it to be of great importance, we continued our inquiries, and traced out persons of whom we had taken casts some years before, who were known to have succeeded in their respective occupations, and others who had not succeeded; also some who had gone on without adopting any new occupation: and now we possess about 140 casts, proving more than 60 cases; the greater portion showing the changes of form of the head to have corresponded with the altered actions and successful studies of those individuals at various ages—many of these changes occurring after 30, 40, and even after 60 years of age. This point, if properly weighed and practically wrought out, inculcates a high moral lesson.

Out of the remainder of this part of the collection, being about 600, we have taken 350 casts of distinguished persons, noblemen, legislators, astronomers, judges, barristers, lawyers, actors, natural historians, engineers, whether native or foreign.

The collection is divided into two sections—the preceding being marked with letter A and a number; the remainder with a number only.

The second part of the collection consists of criminals, pathological cases, masks of deceased persons, and national crania. This section is marked with a number only.

We commenced with taking casts of the heads of criminals, it being considered they were almost a type of character in themselves; this was thought to be the case by many persons, even by some of the most eminent phrenologists; and when we had got about 30 casts, we were advised not to go on collecting further, it being supposed an almost useless expenditure of time and labour: our answer at the time was, If we do not continue collecting, shall we not be charged with selecting to suit our purpose? We therefore embraced every opportunity of getting them, and now possess about 150 casts of criminals; but we did not confine ourselves to the limits of the United Kingdom, about one third being from foreign countries, nay

all parts of the world—some state criminals, others of extraordinary character.

Upon my early acquaintance with Drs. Gall and Spurzheim, they, perceiving my anxiety to form a collection, suggested to me the propriety of adding to my collection some pathological cases, such as idiots, imbeciles, cases of insanity, and of malformation, which I have done, and it now consists of about 120 casts; they kindly undertaking, if any thing should occur within their notice, to inform me of it. Their advice was followed. I employed an agent in Paris, who took the casts whenever an opportunity occurred, and now possess some extraordinary cases of monomania, mania, imbecility, idiocy, hydrocephalus, &c. &c. So valuable do we deem these cases, that the expense incurred in procuring them we still consider was wisely incurred.

Another section of the collection consists of masks, upwards of 120, and nearly all of distinguished persons, collected from artists, and purchased at sales,—many of them very rare. These are principally useful for ascertaining the site and size of the intellectual faculties for phrenological purposes; but our object has been to make our collection, as far as we could by casts, *a sort of palpable sketch of the natural history of man*; therefore, whenever the opportunity occurred, we collected authenticated masks, &c. &c. &c.

Another section of the collection we feel will be considered interesting, viz., National Crania; of which we now possess about 500, that is to say, about 150 real skulls, the rest being moulds and casts of well-authenticated specimens. To the late Baron Cuvier I am indebted for permission to take casts from *all* the then (1830) authenticated crania in the Museum of Comparative Anatomy of Paris.

In the endeavour to illustrate the Natural History of Man by casts, we have made a very large collection of busts of ancient philosophers and great men, taken from the marbles originally in the Louvre, Florentine, the Prussian galleries, and private collections; and it is surprising to observe how

phrenologically they bear out the biographical accounts of them.

We have also a very large collection of busts of eminent men and distinguished characters of our own country, with a few celebrated foreigners. These two collections of busts amount to about 300, *many of them showing that great attention has been paid by artists to the form of the head.*

Upon reading the works of Drs. Gall and Spurzheim, and perceiving their observations on comparative anatomy to be worthy the attention of the Phrenologist, I have made a large collection of the skulls of animals and birds, with a view, if time permits, to make them a special study. To accomplish this, I felt a single specimen of any species or variety was not sufficient; consequently, I have collected as great a variety of each as I could procure, my intention being, if I can get time and room, to classify them.

I have procured specimens of horses, mares, and geldings, of most of the varieties of this and foreign countries; also, of horned cattle, and sheep, particularly of this country. We have specimens of nearly all the singing and other birds; also of our domestic birds and fowls, and a great number of animals, birds, and fowls from Asia, Africa, and America, and some from the Arctic regions.

We embraced every opportunity of collecting, feeling that, should we not get time, the collection might, perhaps, fall, at some future period, into the hands of some scientific person, both able and willing to systematize it. This part of our collection amounts to near 3000 specimens.

Upon reading an address of Mr. Carmichael, surgeon, of Dublin, to his pupils, on opening his course of lectures for the season 1830, wherein he states that it was his duty to teach them the old or customary mode of what is called dissection of the brain, but that he should also endeavour to explain to them the mode of dissecting the brain adopted by Drs. Gall and Spurzheim, which he considered the true and correct mode of dissecting the brain,—the old mode being requisite for them

to know for their examinations, but he hoped he should live long enough to hear the present useless mode of dissecting the brain called the obsolete;—also hearing that Dr. Caldwell of America used nearly the same language to his pupils, and that many of our able anatomists spoke of their dissections of the brain in the same terms:—feeling with Mr. Carmichael, Dr. Caldwell, and those eminent anatomists, that the present mode would become obsolete—at Joshua Brooks's sale I purchased a set of 10 models and casts in sections, coloured, showing elaborately the present mode of dissecting the brain, to accompany my collection, so that they might not be lost to my country.

I have also two models of dissections made by Dr. Gall, expressly with the view of showing the fibrous structure of the brain, which he kindly made purposely for me.

I have a complete set of Ryle's wax models, of Gall's and Spurzheim's, and the latter's own mode of dissection of the brain; making, I hope, altogether an interesting collection for phrenological purposes, as well as a highly useful one for elucidating the Natural History of Man.

I have thus, at the earnest desire of many intelligent and sincere lovers of the science, explained the object I had in view of forming my collection, the advice by which I was guided, and the extent to which I have hitherto prosecuted my inquiries, not altogether, it is to be hoped, unsuccessfully either for myself or for all respectable phrenologists. My collection has always for years been accessible to all properly recommended phrenologists, to the literary and scientific, as well as to all persons of eminence, whether my fellow-countrymen or otherwise; and I have one consolation, notwithstanding whatever it may have cost me, that the most distinguished individuals, both native and foreign, deliberately pronounce it, *though the collection of a self-educated individual*, an extraordinary mass of evidence in support of the truth of the science, (accumulated, as it has been, "with little assistance of the learned, and without any patronage of the great,") and

fully compensating for any deficiency of scholarship (to which I have never made the least earthly pretension) I may have, and still do display in attempting to disseminate a knowledge of a science which still promises, and has already effected, so much for mankind.

NOTICE.

PERSONS desirous of making inquiry into the science are informed, that any of the works published on Phrenology may be obtained at J. De Ville's, 367, Strand.

To those who wish to take a slight view of the science as an introduction to further inquiry, the mapped bust, with the names and numbers of the different organs written in their situations on the head, with this Manual, containing a variety of illustrations, will be found useful. Published by J. De Ville. Large Bust, 10*s.* 6*d.*; Small Bust, 4*s.*; Manual, 3*s.* 6 bds. Conversations, 1*s.*

Casts, for the illustration of particular developments or purposes, may be had, on reasonable terms, by sending to J. De Ville particulars of what they are intended to illustrate.

Those who wish to take up the science as a study, for its practical application, or for lecturing, may be provided with a collection of casts, showing every organ, large and small, together with some points in illustration; also some national skulls, suitable for the student or lecturer, in collections, the price of which varies from two guineas to fourteen pounds, exclusive of package.

PHRENOLOGICAL WORKS.

BY DR. GALL.

Dr. Gall's Functions of the Brain, translated by Dr. Winslow Lewis, 6 vols. 8vo., 1*l.* 10*s.*

BY DR. SPURZHEIM.

Anatomy of the Brain, 14*s.*

Phrenology; or, the Doctrines of the Relation between Mind and Body, 16*s.*

Philosophical Principles of Phrenology, 7*s.* 6*d.*

Phrenology in Connexion with the Study of Physiognomy, 22*s.*

Observations on Insanity, 14*s.*

Elementary Principles of Education, 7*s.*

Sketch of the Natural Laws of Man, 6*s.*

By Mr. George Combe.

System of Phrenology, 2 vols., 21*s.*

Constitution of Man, 4*s.*, and 1*s.* 6*d.*

Lectures on Popular Education, 1*s.* 6*d.* &c. &c.

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